IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of:	§	Group Art Unit: 2151
	§	
Bernard A. Traversat, et al.	§	Examiner: Hamza, Faruk.
	§	
	§	Atty. Dkt. No.: 5681-06800
	§	P7016
Serial No. 10/055,773	§	
	§	
	§	
Filed: January 22, 2002	§	
	§	
For: Peer-to-Peer Computing Architecture	§	
	§	
	§	

APPEAL BRIEF

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir/Madam:

In response to the Notice of Panel Decision mailed November 15, 2007, Appellants present this Appeal Brief. **No extension of time is due since this Appeal Brief is filed within one month of the mailing date of the Notice of Panel Decision.** Appellants respectfully request that the Board of Patent Appeals and Interferences consider this appeal.

I. REAL PARTY IN INTEREST

As evidenced by the assignment recorded at Reel 012546, Frame 0932, the subject application is owned by Sun Microsystems, Inc., a corporation organized and existing under and by virtue of the laws of the State of Delaware, and now having its principal place of business at 4150 Network Circle, Santa Clara, CA 95054.

II. RELATED APPEALS AND INTERFERENCES

Appellants have included in the Appendix herewith a copy of a Decision on Appeal from U.S. Application No. 10/054,809 which involved a similar issue as is present in this application in regard to a rejection based on a published utility application that was filed later than the filing date of the application under examination, but which claimed priority to a provisional application filed earlier than the application under examination. As in the instant case, the Appellants in the 10/054,809 case argued that the later published utility was not a prior art reference since the earlier provisional application did not provide full support for the subject matter relied on by the Examiner in the later utility application and that no claim of the published utility application was supported in the provisional. Also as in the instance case the Examiner in the 10/054,809 case argued that it was the Applicants burden to prove that the earlier provisional applications do not provide support for the subject matter of the later utility application and the necessary claim support. On appeal, the Board confirmed that the burden was on the Examiner, in order to present a proper *prima facie* rejection, to show where the earlier provisional applications provide support for each instance of subject matter relied on in the later utility application.

III. STATUS OF CLAIMS

Claims 1-116 are pending and rejected. Claims 6 and 41 are both rejected (first ground of rejection, obviousness-type doubled patenting) and objected to (as allowable if re-written in independent form). The rejection of claims 1-116 is being appealed. A copy of claims 1-116 as on appeal is included in the Claims Appendix below.

IV. STATUS OF AMENDMENTS

No amendments have been submitted subsequent to the final rejection.

V. SUMMARY OF CLAIMED SUBJECT MATTER

Independent claim 1 is directed to a peer computing system, including a plurality of peer nodes (*See, e.g.,* items 104A-F, 200A-F, 244A-G, of FIGs. 1A, 1B, 2, 4, 13-17, 19-26, 27A-B, 28A-B; p. 9, lines 1-6 and 24-30; p. 12, lines 4-24; p. 18, lines 5-12; p. 20, lines 4-15; p. 21, lines 22-30; p. 25, lines 18-30; and p. 33, line 5 – p. 35, line 2) operable to couple to a network (*See, e.g.,* item 106 of FIGs. 1A and 1B; and p. 7, line 27 – p. 8, line 11, p. 9, lines 8-22, p. 22, line 14-24, and p. 125, lines 4-11). The plurality of peer nodes are configured to implement a peer-to-peer environment (*See, e.g.,* p. 10, lines 4-18; p. 22, lines 26-30; and p. 32, lines 2-30) on the network according to a peer-to-peer platform.

The peer-to-peer platform (*See, e.g.,* p. 7, lines 3 – p. 8, line 28; p. 9, lines 8-22) includes a core layer (*See, e.g.,* item 120, FIG. 2; p. 8, line 22 – p. 9, line 22; p. 18, lines 15-30) including one or more peer-to-peer platform protocols (*See, e.g.,* p. 7, lines 3 – p. 8, line 28; and p. 64, line 3 – p. 67, line 6) for enabling the peer nodes to discover each other (*See, e.g.,* p. 69, line 16 – p. 72, line 28), communicate with each other and cooperate with each other to form peer groups (*See, e.g.,* items 122 and 210A-B in FIGs. 2, 13, 14, 19, 24, 25 and 26; p. 7, lines 6-12; and p. 35, line 4 – p. 37, line 20) and share content (*See, e.g.,* p. 37, line 22 – p. 39, line 24) in the peer-to-peer environment. At least one of the peer-to-peer platform protocols is configured to be used by a peer node to discover peer nodes that are members of specified peer groups (*See, e.g.,* p. 71, lines 2-9).

The peer-to-peer platform also includes a service layer (*See, e.g.,* item 140, FIG. 2; p. 18, lines 15 – 23; p. 22, line 26 – p. 24, line 5) including one or more core services (See, e.g., p. 46, line 7 – p. 49, line 30) each provided by one or more of the peer nodes in the peer-to-peer environment. At least a subset of the core services are operable to be used by the plurality of peer nodes in forming and participating in the peer groups. Each of the core services is configured to be accessed by a plurality of peer nodes in accordance with at least one of the peer-to-peer platform protocols.

The peer-to-peer platform further includes an application layer (*See, e.g.,* item 150, FIG. 2; p. 10, lines 20-30; p.24, line 7 – p. 25, line 11) including one or more applications (*See, e.g.,* items 152 and 154, FIG. 2; p. 10, lines 20-30; p.24, line 7 – p. 25, line 11) each provided by one or more of the peer nodes in the peer-to-peer environment. Each of the applications is configured to be accessed in accordance with at least one of the peer-to-peer platform protocols and at least a subset of the one or more applications are each configured to access at least one of the core services to perform application tasks in the peer-to-peer environment in accordance with at least one of the peer-to-peer platform protocols.

Independent claim 36 is directed to a peer node (*See, e.g.,* items 104A-F, 200A-F, 244A-G, of FIGs. 1A, 1B, 2, 4, 13-17, 19-26, 27A-B, 28A-B; p. 9, lines 1-6 and 24-30; p. 12, lines 4-24; p. 18, lines 5-12; p. 20, lines 4-15; p. 21, lines 22-30; p. 25, lines 18-30; and p. 33, line 5 – p. 35, line 2) including one or more network interfaces for coupling to a network (*See, e.g.,* item 106 of FIGs. 1A and 1B; and p. 7, line 27 – p. 8, line 11, p. 9, lines 8-22, p. 22, line 14-24, and p. 125, lines 4-11) and a memory including program instructions. The program instructions are executable within the peer node to implement, according to a peer to peer platform (*See, e.g.,* p. 7, lines 3 – p. 8, line 28; p. 9, lines 8-22): a core layer (*See, e.g.,* item 120, FIG. 2; p. 8, line 22 – p. 9, line 22; p. 18, lines 15-30), a service layer (*See, e.g.,* item 140, FIG. 2; p. 18, lines 15 – 23; p. 22, line 26 – p. 24, line 5) and an application layer (*See, e.g.,* item 150, FIG. 2; p. 10, lines 20-30; p.24, line 7 – p. 25, line 11).

According to claim 36, the core layer includes one or more peer-to-peer platform protocols (*See, e.g.,* p. 7, lines 3 – p. 8, line 28; p. 21, line 11 – p. 22, line 24) for enabling the peer node to discover other peer nodes (*See, e.g.,* p. 69, line 16 – p. 72, line 28), communicate with the other peer nodes, and cooperate with the other peer nodes to form peer groups (*See, e.g.,* items 122 and 210A-B in FIGs. 2, 13, 14, 19, 24, 25 and 26; p. 7, lines 6-12; and p. 35, line 4 – p. 37, line 20) and share content (*See, e.g.,* p. 37, line 22 – p. 39, line 24) in a peer-to-peer environment (*See, e.g.,* p. 10, lines 4-18; p. 22, lines 26-30; and p. 32, lines 2-30) on the network, wherein at least one of the one or more

peer-to-peer platform protocols is configured to be used by the peer nodes to discover other peer nodes that are members of specified peer groups (*See, e.g.*, p. 71, lines 2-9).

The service layer (*See, e.g.,* item 140, FIG. 2; p. 18, lines 15 – 23; p. 22, line 26 – p. 24, line 5) includes one or more core services in the peer-to-peer environment. At least a subset of the core services is operable to be used by the peer node and the other peer nodes in forming and participating in the peer groups. Each of the one or more core services is configured to be accessed in accordance with at least one of the one or more peer-to-peer platform protocols.

The application layer (*See, e.g.,* item 150, FIG. 2; p. 10, lines 20-30; p.24, line 7 – p. 25, line 11) includes one or more applications (*See, e.g.,* items 152 and 154, FIG. 2; p. 10, lines 20-30; p.24, line 7 – p. 25, line 11) and each of the applications is configured to be accessed by the peer node and other peer nodes in accordance with at least one of the peer-to-peer platform protocols. At least a subset of the applications are each configured to access at least one of the core services to perform application tasks in the peer-to-peer environment in accordance with at least one of the peer-to-peer platform protocols.

Independent claim 53 is directed to a peer node (*See, e.g.,* items 104A-F, 200A-F, 244A-G, of FIGs. 1A, 1B, 2, 4, 13-17, 19-26, 27A-B, 28A-B; p. 9, lines 1-6 and 24-30; p. 12, lines 4-24; p. 18, lines 5-12; p. 20, lines 4-15; p. 21, lines 22-30; p. 25, lines 18-30; and p. 33, line 5 – p. 35, line 2) including one or more network interface for coupling to a network (*See, e.g.,* item 106 of FIGs. 1A and 1B; and p. 7, line 27 – p. 8, line 11, p. 9, lines 8-22, p. 22, line 14-24, and p. 125, lines 4-11) and a memory including program instructions executable within the peer node to discover (*See, e.g.,* p. 69, line 16 – p. 72, line 28) and access an instance of a service on one of a plurality of peer nodes. The one of the plurality of peer nodes is local to a network location of the peer node on the network and the plurality of peer nodes each host an instance of the same service. The discovering and accessing the instance of the service are performed in accordance with one or more peer-to-peer platform protocols (*See, e.g.,* p. 7, lines 3 – p. 8, line 28; p. 21, line 11 – p. 22, line 24).

The peer node is configured to move from the network location to a different network location (*See, e.g.*, item 404, FIG. 29; p. 27, lines 14-21) and the program instructions are further executable within the peer node to discover and access a different instance of the service on a different one of the plurality of peer nodes. The different one of the plurality of peer nodes is local to the different network location. The discovering and accessing the different instance of the service are performed in accordance with the one or more peer-to-peer platform protocols.

Independent claim 55 is directed to a peer computing system including a plurality of peer nodes (*See, e.g.,* items 104A-F, 200A-F, 244A-G, of FIGs. 1A, 1B, 2, 4, 13-17, 19-26, 27A-B, 28A-B; p. 9, lines 1-6 and 24-30; p. 12, lines 4-24; p. 18, lines 5-12; p. 20, lines 4-15; p. 21, lines 22-30; p. 25, lines 18-30; and p. 33, line 5 – p. 35, line 2) that each implement one or more peer-to-peer platform protocols (*See, e.g.,* p. 7, lines 3 – p. 8, line 28; p. 21, line 11 – p. 22, line 24) for enabling the plurality of peer nodes to host and access services in a peer-to-peer environment (*See, e.g.,* p. 10, lines 4-18; p. 22, lines 26-30; and p. 32, lines 2-30). At least a subset of the plurality of peer nodes that each host an instance of a service and each of at least a subset of the plurality of peer nodes is operable to provide access to an instance of the service hosted by the particular peer node to a different one of the plurality of peer nodes at a network location where the particular peer node is local to the network location.

The different one of the plurality of peer nodes is operable to provide a unique identifier (*See, e.g.,* p. 12, lines 13-30; p. 19, line 22 – p. 20, line 2) to the instance of the service hosted by the particular peer node, where the unique identifier distinguishes the different one of the plurality of peer nodes from the other peer nodes on the network.

The different one of the plurality of peer nodes is operable to move to a different network location (*See, e.g.*, item 404, FIG. 29; p. 27, lines 14-21). The instance of the service is operable to recognize the different one of the plurality of peer nodes using the unique identifier and to route information provided by the service to the different one of

the plurality of peer nodes at the different network location.

Independent claim 56 is directed to a peer node (*See, e.g.,* items 104A-F, 200A-F, 244A-G, of FIGs. 1A, 1B, 2, 4, 13-17, 19-26, 27A-B, 28A-B; p. 9, lines 1-6 and 24-30; p. 12, lines 4-24; p. 18, lines 5-12; p. 20, lines 4-15; p. 21, lines 22-30; p. 25, lines 18-30; and p. 33, line 5 – p. 35, line 2) including one or more network interfaces for coupling to a network and a memory including program instructions.

The program instructions are executable within the peer node to discover (*See, e.g.,* p. 69, line 16 – p. 72, line 28) and access an instance of a service on one of the peer nodes local to a network location of the peer node on the network. The peer nodes each host an instance of the same service.

The discovering and accessing the instance of the service are performed in accordance with one or more peer-to-peer platform protocols (*See, e.g.,* p. 7, lines 3 – p. 8, line 28; p. 21, line 11 – p. 22, line 24).

The program instructions are further executable within the peer node to provide a unique identifier (*See, e.g.,* p. 12, lines 13-30; p. 19, line 22 – p. 20, line 2) for the peer node to the instance of the service where the unique identifier distinguishes the peer node from the other peer nodes on the network.

The peer node is configured to move from the network location to a different network location (*See, e.g.*, item 404, FIG. 29; p. 27, lines 14-21) and the program instructions are further executable to discover and access the same instance of the service on the one of the peer nodes where discovering and accessing the same instance of the service are performed in accordance with the peer-to-peer platform protocols.

The instance of the service is operable to recognize the peer node using the unique identifier and to route information provided by the service to the peer node at the different network location.

Independent claim 57 is directed to a peer computing system including a plurality of peer nodes (*See, e.g.,* items 104A-F, 200A-F, 244A-G, of FIGs. 1A, 1B, 2, 4, 13-17, 19-26, 27A-B, 28A-B; p. 9, lines 1-6 and 24-30; p. 12, lines 4-24; p. 18, lines 5-12; p. 20, lines 4-15; p. 21, lines 22-30; p. 25, lines 18-30; and p. 33, line 5 – p. 35, line 2) and at least a subset of the plurality of peer nodes that each includes an instance of a content (*See, e.g.,* p. 37, line 22 – p. 39, line 24). According to claim 57, the plurality of peer nodes each implement one or more peer-to-peer platform protocols (*See, e.g.,* p. 7, lines 3 – p. 8, line 28; p. 21, line 11 – p. 22, line 24) for enabling the plurality of peer nodes to discover and access contents in a peer-to-peer environment (*See, e.g.,* p. 10, lines 4-18; p. 22, lines 26-30; and p. 32, lines 2-30).

Each of the plurality of peer nodes is configured to discover and access an instance of the content (*See, e.g.,* p. 37, line 22 – p. 39, line 24) on one of the at least a subset of the plurality of peer nodes that is local to a network location of the particular peer node on the network. The discovering and accessing the instance of the content is performed in accordance with the one or more peer-to-peer platform protocols.

Each of the plurality of peer nodes is also configured to move from the network location to a different network location (*See, e.g.*, item 404, FIG. 29; p. 27, lines 14-21) and to discover and access a different instance of the content on a different one of the at least a subset of the plurality of peer nodes. The one of the at least a subset of the plurality of peer nodes is local to the different network location.

Additionally, said discovering and accessing the different instance of the content are performed in accordance with the peer-to-peer platform protocols.

Independent claim 58 is directed to a peer node (*See, e.g.,* items 104A-F, 200A-F, 244A-G, of FIGs. 1A, 1B, 2, 4, 13-17, 19-26, 27A-B, 28A-B; p. 9, lines 1-6 and 24-30; p. 12, lines 4-24; p. 18, lines 5-12; p. 20, lines 4-15; p. 21, lines 22-30; p. 25, lines 18-30; and p. 33, line 5 – p. 35, line 2) including one or more network interfaces for coupling to

a network and a memory including program instructions executable within the peer node to discover and access an instance of a content (*See, e.g.,* p. 37, line 22 – p. 39, line 24) on one of a plurality of peer nodes, where the one of the plurality of peer nodes is local to a network location of the peer node on the network. Each of the plurality of peer nodes hosts an instance of the same content. The discovering and accessing the instance of the service are performed in accordance with one or more peer-to-peer platform protocols (*See, e.g.,* p. 7, lines 3 – p. 8, line 28; p. 21, line 11 – p. 22, line 24).

The peer nodes is configured to move from the network location to a different network location (*See, e.g.*, item 404, FIG. 29; p. 27, lines 14-21) and the program instructions are further executable to discover and access a different instance of the content on a different one of the peer nodes local to the different network location. Discovering and accessing the different instance of the content are performed in accordance with the peer-to-peer platform protocols.

Independent claim 59 is directed to a peer computing system including a plurality of peer nodes (*See, e.g.,* items 104A-F, 200A-F, 244A-G, of FIGs. 1A, 1B, 2, 4, 13-17, 19-26, 27A-B, 28A-B; p. 9, lines 1-6 and 24-30; p. 12, lines 4-24; p. 18, lines 5-12; p. 20, lines 4-15; p. 21, lines 22-30; p. 25, lines 18-30; and p. 33, line 5 – p. 35, line 2) operable to couple to a network.

Claim 59 recites means for the peer nodes to discover each other (*See, e.g.,* p. 69, line 16 – p. 72, line 28), communicate with each other and cooperate with each other to form peer groups(*See, e.g.,* items 122 and 210A-B in FIGs. 2, 13, 14, 19, 24, 25 and 26; p. 7, lines 6-12; and p. 35, line 4 – p. 37, line 20), share content (*See, e.g.,* p. 37, line 22 – p. 39, line 24), and discover other peer nodes that are members of specified peer groups (*See, e.g.*, p. 71, lines 2-9), in a peer-to-peer environment (*See, e.g.,* p. 10, lines 4-18; p. 22, lines 26-30; and p. 32, lines 2-30) on the network. The structure corresponding to this function may be provided in the form of a processor found within a peer device, such as sensors, server, PCs, PDA, etc. and may include executable program instructions stored on a memory medium (See, e.g., item 104A-F of FIG. 1; and p. 18, lines 25-30; p.

125, lines 10-17; and p. 30, line 24 – p. 31, line 7).

The peer computing system of claim 59 also includes means for the peer nodes to provide, discover and access one or more services in the peer-to-peer environment (*See, e.g.,* p. 8, line 11 – p. 9, line 5; p. 10, line 4-18), wherein at least a subset of the services are core services operable to be used by the plurality of peer nodes in forming and participating in the peer groups (*See, e.g.,* p. 46, line 17 – page 52, line 6). The structure corresponding to this function may be provided in the form of a processor found within a peer device, such as sensors, server, PCs, PDA, etc. and may include executable program instructions stored on a memory medium (See, e.g., item 104A-F of FIG. 1; and p. 18, lines 25-30; p. 125, lines 10-17; and p. 30, line 24 – p. 31, line 7).

The peer computing system of claim 59 includes mean for the peer nodes to provide, discover and access one or more applications (*See, e.g.,* items 152 and 154, FIG. 2; p. 10, lines 20-30; p.24, line 7 – p. 25, line 11) in the peer-to-peer environment. The structure corresponding to this function may be provided in the form of a processor found within a peer device, such as sensors, server, PCs, PDA, etc. and may include executable program instructions stored on a memory medium (See, e.g., item 104A-F of FIG. 1; and p. 18, lines 25-30; p. 125, lines 10-17; and p. 30, line 24 – p. 31, line 7).

Claim 59 further recites means for at least a subset of the one or more applications to discover and access at least one of the one or more services to perform application tasks in the peer-to-peer environment (*See, e.g.,* FIG. 2, item 150; p. 24, line 12 – p. 25, line 16). The structure corresponding to this function may be provided in the form of a processor found within a peer device, such as sensors, server, PCs, PDA, etc. and may include executable program instructions stored on a memory medium (See, e.g., item 104A-F of FIG. 1; and p. 18, lines 25-30; p. 125, lines 10-17; and p. 30, line 24 – p. 31, line 7).

Dependent claim 71 recites means for member peer nodes in a peer group to receive and reject or accept group membership applications (*See, e.g.,* p. 35, lines 17-24

and p. 50, line 21 – p. 51, line 8). Additionally, the structure corresponding to this function may be provided in the form of a processor found within a peer device, such as sensors, server, PCs, PDA, etc. and may include executable program instructions stored on a memory medium (See, e.g., item 104A-F of FIG. 1; and p. 18, lines 25-30; p. 125, lines 10-17; and p. 30, line 24 – p. 31, line 7).

Independent claim 73 is directed to a peer computing system including a plurality of peer nodes (*See, e.g.,* items 104A-F, 200A-F, 244A-G, of FIGs. 1A, 1B, 2, 4, 13-17, 19-26, 27A-B, 28A-B; p. 9, lines 1-6 and 24-30; p. 12, lines 4-24; p. 18, lines 5-12; p. 20, lines 4-15; p. 21, lines 22-30; p. 25, lines 18-30; and p. 33, line 5 – p. 35, line 2) configured to couple to a network and means for the peer nodes to discover each other (*See, e.g.,* p. 69, line 16 – p. 72, line 28), communicate with each other and cooperate with each other to form peer groups (*See, e.g.,* items 122 and 210A-B in FIGs. 2, 13, 14, 19, 24, 25 and 26; p. 7, lines 6-12; and p. 35, line 4 – p. 37, line 20) and host services in a peer-to-peer environment (*See, e.g.,* p. 10, lines 4-18; p. 22, lines 26-30; and p. 32, lines 2-30) on the network. Additionally, the structure corresponding to this function may be provided in the form of a processor found within a peer device, such as sensors, server, PCs, PDA, etc. and may include executable program instructions stored on a memory medium (See, e.g., item 104A-F of FIG. 1; and p. 18, lines 25-30; p. 125, lines 10-17; and p. 30, line 24 – p. 31, line 7).

The peer computing system of claim 73 further includes means for each of the peer nodes to discover and access an instance of a service provided by one of the at least a subset of the peer nodes (*See, e.g.,* p. 8, line 11 – p. 9, line 5; p. 10, line 4-18), were the one of the at least a subset of peer nodes is local to a network location of the particular one of the peer nodes. The structure corresponding to this function may be provided in the form of a processor found within a peer device, such as sensors, server, PCs, PDA, etc. and may include executable program instructions stored on a memory medium (See, e.g., item 104A-F of FIG. 1; and p. 18, lines 25-30; p. 125, lines 10-17; and p. 30, line 24 – p. 31, line 7).

Additionally, each of the peer nodes is operable to move to a different network location (*See, e.g.*, item 404, FIG. 29; p. 27, lines 14-21).

Claim 73 also includes means for each of the plurality of peer nodes to discover and access a different instance of the service provided by a different one of the at least a subset of the peer nodes (*See, e.g.,* p. 8, line 11 – p. 9, line 5; p. 10, line 4-18), where the at least one of the subset of peer nodes is local to the different network location of the particular one of the plurality of peer nodes. The structure corresponding to this function may be provided in the form of a processor found within a peer device, such as sensors, server, PCs, PDA, etc. and may include executable program instructions stored on a memory medium (See, e.g., item 104A-F of FIG. 1; and p. 18, lines 25-30; p. 125, lines 10-17; and p. 30, line 24 – p. 31, line 7).

Independent claim 75 is directed to a peer computing system including a plurality of peer nodes (*See, e.g.,* items 104A-F, 200A-F, 244A-G, of FIGs. 1A, 1B, 2, 4, 13-17, 19-26, 27A-B, 28A-B; p. 9, lines 1-6 and 24-30; p. 12, lines 4-24; p. 18, lines 5-12; p. 20, lines 4-15; p. 21, lines 22-30; p. 25, lines 18-30; and p. 33, line 5 – p. 35, line 2) configured to couple to a network and means for the peer nodes to discover each other (*See, e.g.,* p. 69, line 16 – p. 72, line 28), communicate with each other and cooperate with each other to form peer groups (*See, e.g.,* items 122 and 210A-B in FIGs. 2, 13, 14, 19, 24, 25 and 26; p. 7, lines 6-12; and p. 35, line 4 – p. 37, line 20) and host services in a peer-to-peer environment (*See, e.g.,* p. 10, lines 4-18; p. 22, lines 26-30; and p. 32, lines 2-30) on the network. The structure corresponding to this function may be provided in the form of a processor found within a peer device, such as sensors, server, PCs, PDA, etc. and may include executable program instructions stored on a memory medium (See, e.g., item 104A-F of FIG. 1; and p. 18, lines 25-30; p. 125, lines 10-17; and p. 30, line 24 – p. 31, line 7).

Furthermore, at least a subset of the peer nodes each hosts an instance of a particular service. The peer computing system of claim 75 also includes means for each of the peer nodes to discover and access an instance of a service provided by one of the at

least a subset of the peer nodes where the one of the at least a subset of the peer nodes is local to a network location of the particular one of the peer nodes (*See, e.g.,* p. 8, line 11 – p. 9, line 5; p. 10, line 4-18). The structure corresponding to this function may be provided in the form of a processor found within a peer device, such as sensors, server, PCs, PDA, etc. and may include executable program instructions stored on a memory medium (See, e.g., item 104A-F of FIG. 1; and p. 18, lines 25-30; p. 125, lines 10-17; and p. 30, line 24 – p. 31, line 7). Each of the peer nodes is operable to move to a different network location (*See, e.g.*, item 404, FIG. 29; p. 27, lines 14-21).

The peer computing system of claim 75 further includes means for each of the peer nodes to access the instance of the service provided by the one of the at least a subset of the peer nodes from the different network location of the particular one of the plurality of peer nodes (*See, e.g.,* p. 8, line 11 – p. 9, line 5; p. 10, line 4-18; p. 27, line 11 – p. 29, line 20). The structure corresponding to this function may be provided in the form of a processor found within a peer device, such as sensors, server, PCs, PDA, etc. and may include executable program instructions stored on a memory medium (See, e.g., item 104A-F of FIG. 1; and p. 18, lines 25-30; p. 125, lines 10-17; and p. 30, line 24 – p. 31, line 7).

Claim 75 further recites means for the instance of the service to recognize the particular one of the plurality of peer nodes and to route information provided by the service to the particular one of the plurality of peer nodes at the different network location. (*See, e.g.,* p. 8, line 11 – p. 9, line 5; p. 10, line 4-18; p. 27, line 11 – p. 29, line 20). The structure corresponding to this function may be provided in the form of a processor found within a peer device, such as sensors, server, PCs, PDA, etc. and may include executable program instructions stored on a memory medium (See, e.g., item 104A-F of FIG. 1; and p. 18, lines 25-30; p. 125, lines 10-17; and p. 30, line 24 – p. 31, line 7).

Independent claim 76 is directed to a peer computing system including a plurality of peer nodes (*See, e.g.,* items 104A-F, 200A-F, 244A-G, of FIGs. 1A, 1B, 2, 4, 13-17,

19-26, 27A-B, 28A-B; p. 9, lines 1-6 and 24-30; p. 12, lines 4-24; p. 18, lines 5-12; p. 20, lines 4-15; p. 21, lines 22-30; p. 25, lines 18-30; and p. 33, line 5 – p. 35, line 2) operable to couple to a network.

Claim 76 recites means for the peer nodes to discover each other (*See, e.g.,* p. 69, line 16 – p. 72, line 28), communicate with each other and cooperate with each other to form peer groups (*See, e.g.,* items 122 and 210A-B in FIGs. 2, 13, 14, 19, 24, 25 and 26; p. 7, lines 6-12; and p. 35, line 4 – p. 37, line 20) and to share content (*See, e.g.,* p. 37, line 22 – p. 39, line 24), where at least a subset of the peer nodes each hosts an instance of a particular content. The structure corresponding to this function may be provided in the form of a processor found within a peer device, such as sensors, server, PCs, PDA, etc. and may include executable program instructions stored on a memory medium (See, e.g., item 104A-F of FIG. 1; and p. 18, lines 25-30; p. 125, lines 10-17; and p. 30, line 24 – p. 31, line 7).

The peer computer system of claim 76 also includes means for each of the peer nodes to discover and access an instance of a content provided by one of the at least a subset of the peer nodes, (*See, e.g.,* p. 37, line 22 – p. 39, line 24) where the one of the at least a subset of the peer nodes is local to a network location of the particular one of the peer nodes. The structure corresponding to this function may be provided in the form of a processor found within a peer device, such as sensors, server, PCs, PDA, etc. and may include executable program instructions stored on a memory medium (See, e.g., item 104A-F of FIG. 1; and p. 18, lines 25-30; p. 125, lines 10-17; and p. 30, line 24 – p. 31, line 7). Additionally, each of the peer nodes is operable to move to a different network location (*See, e.g.*, item 404, FIG. 29; p. 27, lines 14-21).

The peer computer system of claim 76 also includes means for each of the peer nodes to discover and access a different instance of the content provided by a different one of the at least a subset of the peer nodes (*See, e.g.,* p. 37, line 22 – p. 39, line 24),, where the different one of the at least a subset of the of peer nodes is local to the different network location of the particular one of the per nodes. The structure corresponding to

this function may be provided in the form of a processor found within a peer device, such as sensors, server, PCs, PDA, etc. and may include executable program instructions stored on a memory medium (See, e.g., item 104A-F of FIG. 1; and p. 18, lines 25-30; p. 125, lines 10-17; and p. 30, line 24 – p. 31, line 7). Additionally, each of the peer nodes is operable to move to a different network location (*See, e.g.*, item 404, FIG. 29; p. 27, lines 14-21).

Independent claim 77 is directed to a method for implementing a peer-to-peer environment (*See, e.g.,* p. 10, lines 4-18; p. 22, lines 26-30; and p. 32, lines 2-30) on a network including a plurality of peer nodes coupled to a network each implementing a core layer (*See, e.g.,* item 120, FIG. 2; p. 8, line 22 – p. 9, line 22; p. 18, lines 15-30) of a peer-to-peer platform (*See, e.g.,* p. 7, lines 3 – p. 8, line 28; p. 9, lines 8-22), where the core layer including one or more peer-to-peer platform protocols (*See, e.g.,* p. 7, lines 3 – p. 8, line 28; p. 21, line 11 – p. 22, line 24) for enabling the peer nodes (*See, e.g.,* items 104A-F, 200A-F, 244A-G, of FIGs. 1A, 1B, 2, 4, 13-17, 19-26, 27A-B, 28A-B; p. 9, lines 1-6 and 24-30; p. 12, lines 4-24; p. 18, lines 5-12; p. 20, lines 4-15; p. 21, lines 22-30; p. 25, lines 18-30; and p. 33, line 5 – p. 35, line 2) to discover each other (*See, e.g.,* p. 69, line 16 – p. 72, line 28), communicate with each other and cooperate with each other to form peer groups (*See, e.g.,* items 122 and 210A-B in FIGs. 2, 13, 14, 19, 24, 25 and 26; p. 7, lines 6-12; and p. 35, line 4 – p. 37, line 20) and share content (*See, e.g.,* p. 37, line 22 – p. 39, line 24) in the peer-to-peer environment. At least one of the peer-to-peer platform protocols is configured to be used by the peer nodes to discover other peer nodes that are members of specified peer groups (*See, e.g.*, p. 71, lines 2-9).

The method of claim 77 also includes the peer nodes each implementing a service layer (*See, e.g.,* item 140, FIG. 2; p. 18, lines 15 – 23; p. 22, line 26 – p. 24, line 5) including one or more core services each provided by one or more of the peer nodes in the peer-to-peer environment, where each of the core services is configured to be accessed by peer nodes in the peer-to-peer environment in accordance with at least a subset of the peer-to-peer platform protocols.

The method further includes the plurality of peer nodes each implementing an application layer (*See, e.g.,* item 150, FIG. 2; p. 10, lines 20-30; p.24, line 7 – p. 25, line 11) including one or more applications (*See, e.g.,* items 152 and 154, FIG. 2; p. 10, lines 20-30; p.24, line 7 – p. 25, line 11) each provided by one or more of the peer nodes, where each of the applications is configured to be accessed in accordance with at least one of the peer-to-peer platform protocols and where at least a subset of the applications are each configured to access at least one of the core services to perform application tasks in the peer-to-peer environment in accordance with at least one of the peer-to-peer platform protocols.

The method also includes at least a subset of the peer nodes accessing at least a subset of the core services in accordance with at least one of the peer-to-peer platform protocols to form one or more peer groups in the peer-to-peer environment.

Independent claim 97 is directed to a method including a peer node (*See, e.g.,* items 104A-F, 200A-F, 244A-G, of FIGs. 1A, 1B, 2, 4, 13-17, 19-26, 27A-B, 28A-B; p. 9, lines 1-6 and 24-30; p. 12, lines 4-24; p. 18, lines 5-12; p. 20, lines 4-15; p. 21, lines 22-30; p. 25, lines 18-30; and p. 33, line 5 – p. 35, line 2) discovering an instance of a service on one of a plurality of peer nodes, where one of the peer nodes is local to a network location of the peer node on a network and where the peer node each host an instance of the same service.

The method of claim 97 also includes the peer node accessing the instance of the service, where discovering and accessing the instance of the service are performed in accordance with one or more peer-to-peer platform protocols (*See, e.g.,* p. 7, lines 3 – p. 8, line 28; p. 21, line 11 – p. 22, line 24). Claim 97 further recite the peer node moving from the network location to a different network location (*See, e.g.*, item 404, FIG. 29; p. 27, lines 14-21) and discovering a different instance of the service on a different one of the peer nodes, where the different one of the peer nodes is local to the different network location.

The method also includes the peer node accessing the different instance of the service, where discovering and accessing the different instance of the service are performed in accordance with the peer-to-peer platform protocols.

Independent claim 99 is directed to method including a peer node (*See, e.g.,* items 104A-F, 200A-F, 244A-G, of FIGs. 1A, 1B, 2, 4, 13-17, 19-26, 27A-B, 28A-B; p. 9, lines 1-6 and 24-30; p. 12, lines 4-24; p. 18, lines 5-12; p. 20, lines 4-15; p. 21, lines 22-30; p. 25, lines 18-30; and p. 33, line 5 – p. 35, line 2) discovering an instance of a service on one of a plurality of peer nodes, where the one of the peer nodes is local to a network location of the peer node on a network and where the peer node each host an instance of the same service.

The method of claim 99 further includes the peer node accessing the instance of the service where discovering and accessing the instance of the service are performed in accordance with one or more peer-to-peer platform protocols (*See, e.g.,* p. 7, lines 3 – p. 8, line 28; p. 21, line 11 – p. 22, line 24). The method of claim 99 also includes the peer node providing a unique identifier (*See, e.g.,* p. 12, lines 13-30; p. 19, line 22 – p. 20, line 2) for the peer node to the instance of the service, where the unique identifier distinguishes the peer node from the other peer nodes on the network.

Claim 99 also recites the peer node moving from the network location to a different network location (*See, e.g.*, item 404, FIG. 29; p. 27, lines 14-21), peer node discovering the same instance of the service on the one of the peer nodes and the peer node accessing the instance of the service, where discovering and accessing the same instance of the service are performed in accordance with the peer-to-peer platform protocols.

The method also includes the instance of the service recognizing the peer node using the unique identifier and routing information to the peer node at the different network location.

Independent claim 100 is directed to a method including a peer node (*See, e.g.,* items 104A-F, 200A-F, 244A-G, of FIGs. 1A, 1B, 2, 4, 13-17, 19-26, 27A-B, 28A-B; p. 9, lines 1-6 and 24-30; p. 12, lines 4-24; p. 18, lines 5-12; p. 20, lines 4-15; p. 21, lines 22-30; p. 25, lines 18-30; and p. 33, line 5 – p. 35, line 2) discovering an instance of a content (*See, e.g.,* p. 37, line 22 – p. 39, line 24) on one of a plurality of peer nodes, where the one of the peer nodes is local to a network location of the peer node on a network and where the peer nodes each include an instance of the same content.

The method of claim 100 also includes the peer node accessing the instance of the content, where discovering and accessing the instance of the content are performed in accordance with one or more peer-to-peer platform protocols (*See, e.g.,* p. 7, lines 3 – p. 8, line 28; p. 21, line 11 – p. 22, line 24). The method further includes the peer node moving from the network location to a different network location (*See, e.g.,* item 404, FIG. 29; p. 27, lines 14-21) and discovering a different instance of the content on a different one of the peer nodes, where the different one of the peer nodes is local to the different network location.

The method of claim 100 also includes the peer node accessing the different instance of the content, where discovering and accessing the different instance of the content are performed in accordance with the peer-to-peer platform protocols.

Independent claim 101 is directed to a computer-accessible storage medium, including program instructions computer-executable to implement a plurality of peer nodes (*See, e.g.,* items 104A-F, 200A-F, 244A-G, of FIGs. 1A, 1B, 2, 4, 13-17, 19-26, 27A-B, 28A-B; p. 9, lines 1-6 and 24-30; p. 12, lines 4-24; p. 18, lines 5-12; p. 20, lines 4-15; p. 21, lines 22-30; p. 25, lines 18-30; and p. 33, line 5 – p. 35, line 2) coupled to a network each implementing a core layer (*See, e.g.,* item 120, FIG. 2; p. 8, line 22 – p. 9, line 22; p. 18, lines 15-30) of a peer-to-peer platform (*See, e.g.,* p. 7, lines 3 – p. 8, line 28; p. 9, lines 8-22). The core layer includes one or more peer-to-peer platform protocols (*See, e.g.,* p. 7, lines 3 – p. 8, line 28; p. 21, line 11 – p. 22, line 24) for enabling the plurality of peer nodes to discover each other (*See, e.g.,* p. 69, line 16 – p. 72, line 28),

communicate with each other and cooperate with each other to form peer groups (*See, e.g.,* items 122 and 210A-B in FIGs. 2, 13, 14, 19, 24, 25 and 26; p. 7, lines 6-12; and p. 35, line 4 – p. 37, line 20) and share content (*See, e.g.,* p. 37, line 22 – p. 39, line 24) in a peer-to-peer environment (*See, e.g.,* p. 10, lines 4-18; p. 22, lines 26-30; and p. 32, lines 2-30), where at least one of the peer-to-peer platform protocols is configured to be used by the peer nodes to discover other peer nodes that are members of specified peer groups (*See, e.g.*, p. 71, lines 2-9).

The program instructions are also computer-executable to implement the peer nodes each implementing a service layer (*See, e.g.,* item 140, FIG. 2; p. 18, lines 15 – 23; p. 22, line 26 – p. 24, line 5) including one or more core services each provided by one or more of the peer nodes in the peer-to-peer environment, where each of the core services are configured to be accessed by peer nodes in accordance with at least a subset of the peer-to-peer platform protocols.

The program instructions are also computer-executable to implement the peer nodes each implementing an application layer (*See, e.g.,* item 150, FIG. 2; p. 10, lines 20-30; p.24, line 7 – p. 25, line 11) including one or more applications (*See, e.g.,* items 152 and 154, FIG. 2; p. 10, lines 20-30; p.24, line 7 – p. 25, line 11) each provided by one or more of the peer nodes, where each of the applications is configured to be accessed in accordance with at least on of the peer-to-peer platform protocols and where at least a subset of the applications are each configured to access at least one of the core services to perform application tasks in the peer-to-peer environment in accordance with at least one of the peer-to-peer platform protocols.

The program instructions are also computer-executable to implement at least a subset of the peer nodes accessing at least a subset of the core services in accordance with at least one of the peer-to-peer platform protocols to form one or more peer groups in the peer-to-peer environment.

Independent claim 114 is directed to a computer-accessible storage medium

including program instructions computer-executable within a peer node (*See, e.g.,* items 104A-F, 200A-F, 244A-G, of FIGs. 1A, 1B, 2, 4, 13-17, 19-26, 27A-B, 28A-B; p. 9, lines 1-6 and 24-30; p. 12, lines 4-24; p. 18, lines 5-12; p. 20, lines 4-15; p. 21, lines 22-30; p. 25, lines 18-30; and p. 33, line 5 – p. 35, line 2) to implement a peer node discovering an instance of a service on one of a plurality of peer nodes, where the one of the peer nodes is local to a network location of the peer node on a network and where the peer nodes each host an instance of the same service.

The program instructions are also executable to implement the peer node accessing the instance of the service, where discovering and accessing the instance of the service are performed in accordance with one or more peer-to-peer platform protocols (*See, e.g.,* p. 7, lines 3 – p. 8, line 28; p. 21, line 11 – p. 22, line 24).

The program instructions are also executable to implement the peer node moving from the network location to a different network location (*See, e.g.*, item 404, FIG. 29; p. 27, lines 14-21) and discovering a different instance of the service on a different one of the plurality of peer nodes, where the different one of the plurality of peer nodes is local to the different network location.

The program instructions are also executable to implement the peer node accessing the different instance of the service, where discovering and accessing the different instance of the service are performed in accordance with the one or more peer-to-peer platform protocols.

The program instructions are also executable to implement the peer node providing a unique identifier (*See, e.g.,* p. 12, lines 13-30; p. 19, line 22 – p. 20, line 2) for the peer node to the different instance of the service, wherein the unique identifier distinguishes the peer node from the other peer nodes on the network.

The program instructions are also executable to implement the different instance of the service recognizing the peer node using the unique identifier and routing

information to the peer node at the different network location.

Independent claim 115 is directed to a computer-accessible storage medium including software instructions computer-executable within a peer node (*See, e.g.,* items 104A-F, 200A-F, 244A-G, of FIGs. 1A, 1B, 2, 4, 13-17, 19-26, 27A-B, 28A-B; p. 9, lines 1-6 and 24-30; p. 12, lines 4-24; p. 18, lines 5-12; p. 20, lines 4-15; p. 21, lines 22-30; p. 25, lines 18-30; and p. 33, line 5 – p. 35, line 2) to implement a peer node discovering an instance of a service on one of a plurality of peer nodes, where the one of the peer nodes is local to a network location of the peer node on a network and where the peer nodes each host an instance of the same service.

Claim 115 also recites the peer node accessing the instance of the service, where said discovering and said accessing the instance of the service are performed in accordance with one or more peer-to-peer platform protocols (*See, e.g.,* p. 7, lines 3 – p. 8, line 28; p. 21, line 11 – p. 22, line 24). The program instructions are also executable to implement the peer node providing a unique identifier (*See, e.g.,* p. 12, lines 13-30; p. 19, line 22 – p. 20, line 2) for the peer node to the instance of the service, wherein the unique identifier distinguishes the peer node from the other peer nodes on the network.

The program instructions are also executable to implement the peer node moving from the network location to a different network location (*See, e.g.*, item 404, FIG. 29; p. 27, lines 14-21), discovering the same instance of the service on the one of the peer nodes and accessing the same instance of the service, where discovering and accessing the same instance of the service are performed in accordance with the peer-to-peer platform protocols.

The program instructions are also executable to implement the instance of the service recognizing the peer node using the unique identifier and routing information to the peer node at the different location.

Independent claim 116 is directed to a computer-accessible storage medium,

including program instructions computer-executable within a peer node (*See, e.g.,* items 104A-F, 200A-F, 244A-G, of FIGs. 1A, 1B, 2, 4, 13-17, 19-26, 27A-B, 28A-B; p. 9, lines 1-6 and 24-30; p. 12, lines 4-24; p. 18, lines 5-12; p. 20, lines 4-15; p. 21, lines 22-30; p. 25, lines 18-30; and p. 33, line 5 – p. 35, line 2) to implement a peer node discovering an instance of a content (*See, e.g.,* p. 37, line 22 – p. 39, line 24) on one of a plurality of peer nodes, where the one of the peer nodes is local to a network location of the peer node on a network, and where the peer nodes each include an instance of the same content.

Claim 116 further recites the peer node accessing the instance of the content, where discovering and accessing the instance of the content are performed in accordance with one or more peer-to-peer platform protocols (*See, e.g.,* p. 7, lines 3 – p. 8, line 28; p. 21, line 11 – p. 22, line 24). Claim 116 also recites the peer node moving from the network location to a different network location (*See, e.g.*, item 404, FIG. 29; p. 27, lines 14-21), and discovering a different instance of the content on a different one of the plurality of peer nodes, wherein the different one of the plurality of peer nodes is local to the different network location.

The program instructions are also executable to implement accessing the different instance of the content, where discovering and accessing the different instance of the content are performed in accordance with the one or more peer-to-peer platform protocols.

The summary above describes various examples and embodiments of the claimed subject matter; however, the claims are not necessarily limited to any of these examples and embodiments. The claims should be interpreted based on the wording of the respective claims.

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

1. Claims 1-116 are rejected under the judiciary created doctrine of obviousness-type double patenting as being unpatentable over the claims of U.S. Pat. No.: 7,065,579.

2. Claims 1-3, 8-13, 15, 17-22, 25-30, 32-38, 40, 42, 44, 45, 47-60, 62, 63, 65-80, 82-84, 86, 87, 89, 90, 92-101, 103, 104, 106-108 and 110-116 are rejected under 35 U.S.C. § 102(e) as being anticipated by Weisman et al. (U.S. Publication 2002/0112058) (hereinafter "Weisman").

3. Claims 4, 7, 14, 16, 23, 24, 31, 39, 43, 46, 61, 64, 81, 85, 88, 91, 102, 105 and 109 re rejected under 35 U.S.C. § 103(a) as being unpatentable over Weisman in view of Ferguson et al. (U.S. Patent 6,490,618) (hereinafter "Ferguson").

VII. ARGUMENT

First Ground of Rejection:

The Examiner rejected claims 1-116 under the judiciary created doctrine of obviousness-type double patenting as being unpatentable over the claims of U.S. Pat. No.: 7,065,579. Applicants traverse this rejection on the grounds that the Examiner has not stated a *prima facie* rejection. Appellants respectfully traverse this rejection for at least the following reasons.

Claims 1-116:

1. The Examiner has filed to provide a prima facie obviousness-type double patenting rejection.

According to MPEP 804.II.B.1, "the analysis employed in an obviousness-type double patenting determination parallels the guidelines for a 35 U.S.C. 103(a) rejection." This section of the MPEP also states that the same "factual inquires … that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are employed when making an obviousness-type double patenting analysis." MPEP 804.II.B.1 also states that the Examiner should list the differences between **each** rejected claim and the claims of the other patent/application, and for **each** difference the Examiner should give the reasons why a person of ordinary skill in the art would conclude that the invention defined in the claim is an obvious variation of the invention defined in a claim of the other patent/application. Just like for a §103 rejection, these reasons should be supported by evidence of record.

In the Final Office Action, the Examiner provides a table that the Examiner claims shows the similarity of the claimed inventions of application number 10/055,773 and U.S. Pat. No. 7,065,579. (Specifically, of claim 1 of the instant application and claim 1 of U.S. Pat. No. 7,065,579). All the Examiner has actually done is taken elements of claim 1 of the instant application and placed them side-by-side with large portions of

claim 1 of 7,065,579. **As can easily be seen from the Examiner's own table, there are many differences between the claims. The Examiner has not provided reasons or evidence showing that all of the differences would be obvious, as is required to state a *prima facie* double patenting rejection per MPEP 804.II.B.1.**

The Examiner has given no reason why a person of ordinary skill in the art would conclude that the invention defined in the claim of the instant application is an obvious variation of the invention defined in a claim of the other patent/application beyond "the peer computing system of the instant application would have processor, network interface, and memory because it would enable the plurality of peer nodes to communicate and exchange information with each other in the network environment", which clearly does not provide sufficient reason for the many other differences in the claims, and does not establish obviousness. Simply providing a side-by-side table comparing two claims that have many differences is not a valid reason why a person of ordinary skill in the art would conclude that the invention defined in the claim is an obvious variation of the invention defined in a claim of the other patent/application. The Examiner has not stated proper grounds for rejection.

In the Advisory action, the Examiner argues (see, response A), "It is respectfully requested that the Applicant explain his position [regarding] 'many differences between the claims.'" As appellants have argued repeatedly, the Examiner specifically not addressed **each difference** of **each rejected claim** of the present application compared to the claims of the other applications. Instead, the Examiner improperly lumped all the claims together and did not address each specific difference. For instance, the Examiner fails to address the differences in scope between Applicants' various independent claims. Instead, the Examiner merely states that claims 36, 53, 55-59, 73, 75-77, 97, 99-101 and 114-116 "are also directed to the same subject matter recited in claim 1." Thus, the Examiner has not addressed the differences between the rejected claims 36, 53, 55-59, 73, 75-77, 97, 99-101 and 114-116 and the claims of the 7,065,579 patent.

Additionally, the Examiner rejects dependent claims 2-35, 37-52, 60-72, 74, 78-96, 98 and 102-112 because "they depend from rejected claims." This is not a valid basis for rejection. The Examiner does not attempt to list any differences between these claims and the claims of the '579 patent. Nor does the Examiner attempt to give reasons why one of ordinary skill would conclude that these claims are obvious variations of the claims of the '579 patent.

The Examiner clearly has not met the requirements stated in MPEP 804.II.B.1 to establish a *prima facie* obviousness-type double patenting rejection.

Second Ground of Rejection:

The Examiner rejected claims 1-3, 8-13, 15, 17-22, 25-30, 32-38, 40, 42, 44, 45, 47-60, 62, 63, 65-80, 82-84, 86, 87, 89, 90, 92-101, 103, 104, 106-108 and 110-116 as being anticipated by Weisman et al. (U.S. Publication 2002/0112058) (hereinafter "Weisman"). Appellants respectfully traverse this rejection for at least the following reasons. Different groups of claims are addressed under their respective subheadings.

1. The rejection of claim 1 is improper because Weisman is not a prior art reference.

More specifically, the Weisman publication was filed on June 1, 2001, after Applicants' priority date of April 24, 2001. Weisman does claim the benefit of a provisional application filed December, 1, 2000. However, the December, 1, 2000 filing date can only be used as Weisman's 35 U.S.C. § 102(e) prior art date for the subject matter that is common to both the Weisman publication and the provisional application. A review of Weisman's provisional application reveals that it varies considerably from Weisman's published utility application.

For example, Weisman's provisional application appears to be a reference manual to using the UPnP API. However, Weisman's provisional application does not appear to

disclose or mention anything regarding using the UPnP API for peer-to-peer networking purposes, as relied on by the Examiner in the rejection of Applicants' claims.

Unless the Examiner can prove that the subject matter on which the Examiner is relying on to reject Appellants' claims is also entirely present in Weisman's provisional application, the rejection is improper. *See, In re Wertheim*, 209 USPQ 554 (CCPA 1981).

In the Advisory Action, the Examiner asserts that Weisman's provisional does support Weisman's utility application and further states, "It is respectfully requested that the burden is on the applicant to prove otherwise" (Advisory Action, Response B). However, the burden to establish a proper rejection clearly falls on the Examiner, not the Applicant. *See, In re Werner,* 154 USPQ 173, 177 (CCPA 1967), *cert. denied*, 389 US 1057 (1968). Moreover, Appellants have already provided examples of deficiencies of Weisman's provisional, to which the Examiner has failed to substantively respond.

As noted above, Weisman's provisional does not support using the UPnP API for peer-to-peer networking. The Examiner has had ample opportunity to respond to Appellants' arguments, but has failed to do so constructively. For instance, the Examiner has failed to cite any portion of Weisman's provisional that provides support for the subject matter on which the Examiner relies in the rejection of Appellants' claims.

Furthermore, in a related case (U.S. Application No. 10/054,809, hereinafter the '809 application), the Board of Patent Appeals and Interferences recently discussed the requirements of a *prima facie* rejection relying on a utility application files after the application under examination but which claimed prior to the filing date of a provisional application. The Board reiterated that the "allocation of burden requires that the USPTO produce the factual basis for its rejection of an application under USC 102 and 103" and that "The one who bears the initial burden of presenting a prima facie case of unpatentability is the Examiner." See, Decision On Appeal, U.S. Patent Application No.

10/054,809, August 31, 2007, p. 8, lines 1-7 (provided in the Related Proceedings Appendix hereto).

On appeal, the Applicants of '809 application argued that the Examiner's cited art, a published utility application to Teodosiu, was not prior art because Teodosiu's published utility application was filed after the '809 application and that the provisional application to which Teodosiu's published application claimed priority did not provided full and proper support for the subject matter of the published application on which the Examiner relied.

As in the instant case, the Examiner in the '809 case argued that is was the Applicants' burden to prove that the earlier provisional application did not support Teodosiu's published utility. However, the board stated that the Examiner's "rejection should show, to establish a prima facie case for unpatentablity, where support resides in the earlier provisional applications for each instance of specific subject matter relied upon in the published application, including an explanation why the provisionals would still be recognized by the artisan as providing support if not 'word for word' the same as the later text or drawings." (emphasis added). The Board further pointed out that "Mere reference to the text or drawings ... is not sufficient." See, Decision On Appeal, U.S. Patent Application No. 10/054,809, August 31, 2007, p. 8, lines 11-20. (emphasis added).

The board also stated that "even if we assume that a published application may have an effective filing date as prior art based on earlier filed provisional applications, the rejections that rely on [the later published application] fail to set forth a prima facie case for unpatentability." See, Decision On Appeal, U.S. Patent Application No. 10/054,809, August 31, 2007, p. 8, line 24 – p. 9, line 3.

This is the exactly the situation in the instant case, namely that the Examiner has failed to provide a prima facie rejection because Weisman's utility application is not prior and the Examiner has not shown that Weisman's provisional application fully

supports every instance of the subject matter of Weisman's later utility relied on by the Examiner.

Moreover, the Weisman publication is not entitled to the June 30, 1999 date as a section 102(e) prior art date unless at least one claim of the Weisman published application is supported (under 35 U.S.C. § 112) in the provisional application. Under 35 U.S.C. 119(e)(1), an application is not entitled to a provisional application's filing date as a prior art date unless at least one claim of the published utility application is supported (per 35 U.S.C. § 112) in the provisional application. Weisman's provisional application does not appear to fully support the claims of Weisman's utility application. For example, Weisman's provisional application does not appear to support peer networking protocol limitations of claim 1 in Weisman's utility application. The rejection is improper unless the Examiner can show that Weisman's published application has the necessary claim support in the provisional application to be entitled to the provisional application's filing date as its § 102(e) prior art date. *See also* M.P.E.P. § 2136.03(IV). Since the Examiner has not provided the necessary evidence to show that the Weisman publication is prior art to the present application, the current rejection is improper.

Claims 1-3, 5, 8, 9, 12, 18, 19, 21, 22, 25, 29-31, 34 and 35:

1. The cited art fails to disclose wherein at least one of the one or more peer-to-peer platform protocols is configured to be used by a peer node to discover peer nodes that are members of specified peer groups.

Furthermore, regarding claim 1, even if Weisman did qualify as prior art, **Weisman fails to disclose *wherein at least one of the one or more peer-to-peer platform protocols is configured to be used by a peer node to discover peer nodes that are members of specified peer groups.*** Weisman teaches a device hosting framework that provides hosting for software-implemented logical devices on a computer to expose their services as controlled devices per a peer networking protocol. Weisman's device

hosting framework encapsulates discovery, description and control protocol operations so that developers do not have to individually implement the peer networking protocol in every logical device.

Moreover, Moreover, Weisman teaches other means for a device to discover other devices that do not involve the specific peer-to-peer platform protocol recited in Appellants' claim. For instance, Weisman describes the discovery protocol in some detail without including a peer-to-peer platform protocol configured to be used by a peer node to discover peer nodes that are members of specified peer groups. For instance, when describing the search query message Weisman teaches using a pattern or target corresponding to a particular device type, for example, but does not describe any way to discover peer nodes that are members of specified peer groups.

In response to the above arguments, the Examiner cites paragraphs [0813-0819] and [0838-0847] of Weisman that describes UPnP networking (Advisory Action, Response C). The Examiner does not provide any argument or explanation regarding how this passage can be interpreted to support the Examiner's position. Nothing in the cited passage mentions any peer-to-peer platform protocols configured to be used by a peer node *to discover peer nodes that are members of specified peer groups*. Weisman, at the Examiner's cited passage, describes two methods for one device to discover another in Weisman's system. In contrast to the Examiner's contention, Weisman teaches that "a control point may learn of a device of interest because that device sent discovery messages advertising itself or because the device responded to a discovery message searching for devices." Thus, not only is Weisman silent regarding peer-to-peer platform protocols configured to be used by a peer node to discover peer nodes that are members of specified peer groups, Weisman teaches other means for a device to discover other devices that does not involve the specific peer-to-peer platform protocol recited in Appellants' claim.

In the Final Office Action, in response to the above arguments (response C), the Examiner asserts that "Applicants' argument is inconsistent with claims. This/these

limitation(s) are not found in the claims", referring to the Applicants' argument that Weisman fails to disclose "*wherein at least one of the one or more peer-to-peer platform protocols is configured to be used by a peer node to discover **other** peer nodes that are members of specified peer groups.*" Claim 1 recites "*wherein at least one of the one or more peer-to-peer platform protocols is configured to be used by a peer node to discover peer nodes that are members of specified peer groups.*" The only difference between the two clauses is that the first clause includes the word **other**. Appellants' argument was simply pointing out the clear meaning of the claims. By definition discovery requires that something that is "other" than the discoverer is discovered. A peer node using a peer-to-peer platform to discover peer nodes that are members of specified peer groups must by definition discover other peer nodes. No "disclosure claimed in the specification" was read into the claims for the purpose of avoiding prior art, as the Examiner erroneously alleges. Moreover, Weisman simply does not teach that *at least one of the one or more peer-to-peer platform protocols is configured to be used by a peer node to discover peer nodes that are members of specified peer groups*.

Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim. *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 221 USPQ 481, 485 (Fed. Cir. 1984). The **identical invention must** be shown in as complete detail as is contained in the claims. *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). Weisman fails to disclose where at least one of the one or more peer-to-peer platform protocols is configured to be used by a peer node to discover peer nodes that are members of specified peer groups.

Thus, the rejection of claim 1 is not supported by the cited art and removal thereof is respectfully requested.

Claim 10:

1. The cited art fails to disclose wherein the one or more peer-to-peer platform protocols includes a discovery protocol for discovering the peer groups in the peer-to-peer environment.

In regards to claim 10, contrary to the Examiner's assertion, Weisman fails to **disclose wherein the one or more peer-to-peer platform protocols includes a discovery protocol for discovering the peer groups in the peer-to-peer environment.** The Examiner relies on Weisman's use of the UPnP discovery protocol, citing paragraphs [0849-0852]. However, the Examiner's reliance on Weisman is misplaced.

Weisman's system does not include a platform protocol that includes a discovery protocol *for discovering the peer groups* in the peer-to-peer environment. Instead, Weisman teaches that the UPnP discovery protocol "allows [a] device to *advertise its services* to control points ..." (emphasis added, paragraph [0849]). Weisman further states, "Through discovery, control points find interesting devices(s)" and that "[d]iscovery enables description (Step 2) where control points learn about device capabilities, control (Step 3) where a control point sends commands to device(s), eventing (Step 4) where control points listen to state changes in device(s), and presentation (Step 5) where control points display a user interface for device(s)" (paragraph [0839]).

Thus, Weisman teaches that the UPnP discovery protocol allows devices to advertise, and hence other devices to discover, their respective services. Weisman fails to mention anything about discovering peer groups in any portion of the discussion of the discovery protocol. In fact, Weisman does not describe, either as the Examiner's cited passage or elsewhere, a protocol for *discovering the peer groups* in the peer-to-peer environment.

For instance, when describing the contents of advertisement messages sent via the discovery protocol, Weisman teaches that "[t]o advertise the full extent of its capabilities, a device multicasts a number of discovery messages corresponding to each of its

embedded devices and services" and that "each message contains information specific to the embedded device (or service) as well as information about its enclosing device" (emphasis added, paragraph [0849]). None of the messages described by Weisman as sent via the discovery protocol includes any information usable for discovering the peer groups.

A discovery protocol for individual devices to advertise their respective capabilities and services is very different from, and does not disclose, a discovery protocol for discovering the peer groups in a peer-to-peer environment. Thus, Weisman teaches a discovery protocol allowing individual devices to advertise their own, individual, capabilities, but fails to disclose anything about peer-to-peer platform protocols including a discovery protocol for *discovering the peer groups* in the peer-to-peer environment.

The rejection of claim 10 is not supported by the cited art and removal thereof is respectfully requested.

Claim 11:

1. The cited art fails to disclose where the one or more peer-to-peer platform protocols define a peer group advertisement format configured for use in advertising the peer groups in the peer-to-peer environment.

In regards to claim 11, Weisman fails to disclose **wherein the one or more peer-to-peer platform protocols define a peer group advertisement format configured for use in advertising the peer groups in the peer-to-peer environment**. The Examiner, as in the rejection of claim 10, discussed above, relies on Weisman's use of the UPnP-based discovery protocol, citing paragraphs [0849-0852] of Weisman. However, the Examiner's reliance on Weisman is misplaced.

As described above regarding the rejection of claim 10, Weisman teaches that the UPnP discovery protocol is used to advertise, and hence discovery, individual devices and their respective capabilities and services. Weisman fails to mention anything, either at the Examiner's cited passage or elsewhere, regarding peer-to-peer platform protocols that define a peer group advertisement format configured for use in advertising peer groups in the peer-to-peer environment. Weisman's description of his discovery protocol fails to include any sort of peer group advertisement format configured for use in advertising peer groups. Instead, Weisman describes a discovery message formatted with "four major components" including a potential target search (e.g., a device type), an identifier for the advertisement, a URL for more information about the device, and a duration for which the advertisement is valid. See, paragraphs [0854-0858].

Weisman's use of advertisements allowing individual devices to advertise their respective capabilities simply does not disclose the specific limitation of wherein the one or more peer-to-peer platform protocols define a peer group advertising format configured for use in advertising the peer groups in the peer-to-peer environment, as recited in Appellants' claim.

2. The cited art fails to disclose wherein said discovering the peer groups returns one or more peer group advertisements formatted in accordance with the peer group advertisement format.

In further regard to claim 11, Weisman fails to disclose **wherein said discovering the peer groups returns one or more group advertisements formatted in accordance with the peer group advertisement format**. As noted above, Weisman use and description of the UPnP-based discovery protocol does not define any sort of peer group advertisement format. Additionally, Weisman fails to mention, nor does Weisman's system include, peer group advertisements and clearly fails to include where discovering peer groups returns one or more peer group advertisements.

Weisman lists a number of discovery messages or advertisements, but none can be considered the group advertisements recited in Appellants' claim. For instance, Weisman teaches that to advertise its capabilities, a device multicasts three discovery messages for the root device, two messages for each embedded device and one for each service. Weisman further teaches that, for example, if a root device has *d* embedded devices and *s* embedded services, but only *k* distinct service types, then "3+2d+k" discovery messages would "advertise[] the full extent of the device's capabilities" (paragraph [0860]). Thus, even when listing the total number of messages to be sent out during discovery/advertisement, Weisman does not mention anything about group advertisements.

Nowhere in the listing of discovery/advertisement messages does Weisman mention anything about discovering peer groups or that discovering peer groups returns one or more group advertisements formatted in accordance with the peer group advertising format.

Without some specific teaching by Weisman regarding wherein discovering peer groups returns one or more group advertisements formatted in accordance with the peer group advertisement format, the Examiner has failed to make a proper showing of anticipation and hence has failed to make a *prima facie* rejection of Appellants' claim.

Claim 13:

1. The cited art fails to disclose wherein the one or more peer-to-peer platform protocols defines a content advertisement format configured for use in advertising the content in the peer-to-peer environment.

In regard to claim 13, Weisman, in contrast to the Examiner's assertion, fails to disclose **wherein the one or more peer-to-peer platform protocols define a content advertisement format configured for use in advertising the content in the peer-to-peer environment**. The Examiner relies on Weisman's use of the UPnP discovery

protocol, citing paragraph [0849-0952]. However, as is clearly stated by Weisman, the discovery protocol "allows [a] device to advertise *its services* to control points" (emphasis added, paragraph [0849]). Weisman does not describe his system's discovery protocol as defining a content advertisement format configured for use in advertising the content in the peer-to-peer environment.

Instead, Weisman's discovery protocol, and hence Weisman system, only advertising devices and their capabilities or services. Weisman fails to mention any sort of content advertisement or anything about advertising the content in the peer-to-peer environment. See paragraphs [0849-0960]. Furthermore, when listing the messages sent and received via the discovery protocol to discover devices (and their services), Weisman includes messages describing the device, embedded devices and services, without once mentioning anything about a content advertisement format configured for use in advertising the content.

2. The cited art fails to disclose wherein said discovering content returns one or more content advertisements formatted in accordance with the content advertisement format.

In further regard to claim 13, Weisman also fails to disclose **wherein said discovering content returns one or more *content advertisements formatted in accordance with the content advertisement format.*** However, the Examiner's reliance on Weisman's use of the UPnP-based discovery protocol is misplaced. Firstly, Weisman fails to disclose anything about a content advertisement format, as discussed above.

Additionally, Weisman fails to mention anything about any content advertisements formatted in accordance with a content advertisement format. Nor does Weisman describe anything about discovering content. Instead, as discussed above, Weisman specifically teaches that his discovery protocol is for discovering devices (including embedded devices) and their services, not discovering content.

Thus, Weisman clearly fails to teach the subject matter on which the Examiner relies.

Claim 15:

1. The rejection of claim 15 is improper because the Examiner's fails to rely on Ferguson as relied on for the rejection of claim 14, from which claim 15 depends.

Regarding claim 15, the rejection is improper because the Examiner rejects claim 14, from which claim 15 depends, under 35 U.S.C. 103(a), relying, in part on U.S. Patent No. 6,490,618 to Ferguson, while rejecting claim 15 under 35 U.S.C. 102(e), relying only Weisman. Thus, claim 15 cannot be anticipated by Weisman since claim 14, from which claim 15 depends, is not anticipated by Weisman.

2. The cited art fails to disclose wherein the one or more peer-to-peer platform protocols define a pipe advertisement format configured for use in advertising pipes in the peer-to-peer environment.

In further regard to claim 15, Weisman fails to disclose **wherein the one or more peer-to-peer platform protocols define a pipe advertisement format configured for use in advertising pipes in the peer-to-peer environment.** The Examiner on both Weisman's use of the UPnP-based discovery protocol and Weisman's web server Interface to the evening manager object, citing paragraphs [0376] and [0849-0852].

As noted above, Weisman's discovery protocol advertises individual devices and their services. Please see the discussions above regarding the rejections of claims 10, 11 and 13 for a discussion of Weisman's discovery protocol. Weisman does not describe the discovery protocol as including anything to do with defining a pipe advertisement format configured for use in advertising pipes in the peer-to-peer environment. Moreover, in the rejection of claim 4, the Examiner admits that Weisman does teach the use of pipes (Final Action, p. 15, lines 9-13).

At the Examiner's other cited passage (paragraph [0376]) Weisman teaches that all requests from a control point sent to a device host computer "pass through the Web Server 154 that determines if the request is related to a device hosted on the machine." Weisman further states that when the device host publishes a device and its services, "each service's event subscription URL will point at the Web Server" and that a query string in the URL "identifies the device and service for which a request is destined." However, routing requests through a web server has nothing to do with one or more peer-to-peer platform protocols that define a pipe advertisement format configured for use in advertising pipes in the peer-to-peer environment.

Even if Weisman's request routing were to include the use of pipes, which it doesn't, Weisman would still fail to disclose peer-to-peer platform protocols that define a pipe advertisement format configured for use in advertising pipes in the peer-to-peer environment.

3. The cited art fails to disclose wherein said discovering pipes returns one or more pipe advertisements formatted in accordance with the pipe advertisement format.

In yet further regard to claim 15, Weisman fails to disclose **wherein said discovering pipes returns one or more pipe advertisements formatted in accordance with the pipe advertisement format**. Nowhere does Weisman mention anything about discovering pipes returning one or more pipe advertisements, whether formatted in accordance with a pipe advertisement format or not. As illustrated by the Examiner's cited passages (e.g., paragraphs [0849-0852]), Weisman teaches a discovery protocol allowing devices to advertise themselves and their services, not pipes. Weisman does not describe any sort of pipe advertising, much less pipe advertising that returns pipe advertisements formatted in accordance with the pipe advertisement format.

Furthermore, Weisman's use of a web server to route requests to an eventing manager object does not have anything at all to do with wherein discovering pipes returns one or more pipe advertisements formatted in accordance with the pipe advertisement format.

Moreover, even if considered in combination with Ferguson (e.g., under 35 U.S.C. 103), Weisman still fails to teach or suggest the limitations of claim 15. Specifically, Ferguson also fails to describe anything about peer-to-peer platform protocols that define a pipe advertisement format configured for use in advertising pipes in the peer-to-peer environment, or about wherein the discovering pipes returns one or more pipe advertisements formatted in accordance with the pipe advertisement format. Thus, whether considered singly (e.g., under 35 U.S.C. 102) or in combination with the Examiner's other cited art (e.g., under 35 U.S.C. 103), the Examiner's reliance on Weisman in the rejection of claim 15 is misplaced.

Claim 17:

1. The rejection of claim 17 is improper because the Examiner's fails to rely on Ferguson as relied on for the rejection of claim 16, from which claim 17 depends.

Regarding claim 17, the rejection of claim 17 is improper, as with the rejection of claim 15 discussed above. The Examiner rejects claim 16, from which claim 17 depends, under 35 U.S.C. 103 relying on both Weisman and Ferguson, but rejects claim 17 under 35 U.S.C. 102 relying only on Weisman. Thus, the rejection of claim 17 is improper.

2. The cited art fails to disclose wherein the one or more peer-to-peer platform protocols define an endpoint advertisement format configured for use in advertising endpoints in the peer-to-peer environment.

In further regard to claim 17, Weisman fails to disclose **wherein the one or more peer-to-peer platform protocols define an endpoint advertisement format**

configured for use in advertising endpoints in the peer-to-peer environment, contrary to the Examiner's assertion. The Examiner relies on Weisman's discovery protocol, citing paragraphs [0849-0852]. However, as described above, Weisman's discovery protocol only advertises devices and their services. Nowhere does Weisman mention any peer-to-peer platform protocols that *define an endpoint advertisement format* configured for use in advertising endpoints.

3. The cited art fails to disclose wherein said discovering endpoints returns one or more endpoint advertisements formatted in accordance with the endpoint advertisement format.

In yet further regard to claim 17, Weisman fails to disclose **wherein said discovering endpoints returns one or more endpoint advertisements formatted in accordance with the endpoint advertisement format**. As noted above, the Examiner relies on Weisman's discovery protocol, but Weisman's discovery protocol only advertises devices and their services, not endpoints. Weisman is silent regarding any sort of endpoint advertisement, much less that discovering endpoints returns one or more endpoint advertisements formatted in accordance with the endpoint advertisement format.

Without some specific teaching by Weisman, Weisman clearly fails to anticipate wherein said discovering endpoints returns one or more endpoint advertisements formatted in accordance with the endpoint advertisement format, as recited in Appellants' claim.

Moreover, even if considered in combination with Ferguson (e.g., under 35 U.S.C. 103), Weisman still fails to teach or suggest the limitations of claim 17. Specifically, Ferguson also fails to describe anything about peer-to-peer platform protocols that define an endpoint advertisement format configured for use in advertising endpoints in the peer-to-peer environment, or about wherein the discovering endpoints returns one or more endpoint advertisements formatted in accordance with the endpoint advertisement format. Thus, whether considered singly (e.g., under 35 U.S.C. 102) or in

combination with the Examiner's other cited art (e.g., under 35 U.S.C. 103), the Examiner's reliance on Weisman in the rejection of claim 17 is misplaced.

Claim 20:

1. The cited art fails to disclose wherein the one or more peer-to-peer platform protocols includes a peer membership protocol for use by the peer nodes in applying for membership in one or more of the peer groups.

In regard to claim 20, Weisman fails to disclose **wherein the one or more peer-to-peer platform protocols includes a peer membership protocol for use by the peer nodes in applying for membership in one or more of the peer groups**. The Examiner cites paragraphs [0034], [0050] and [0069-0074] of Weisman.

The Examiner appears to be relying on Weisman's device hosting, in general. For instance, paragraph [0034] describes how Weisman's Device Host API enables software modules "to publish themselves as peer networking-enabled devices" and that "The Device Host 100 encapsulates the discovery, description, and control protocols of a peer networking protocol." Paragraph [0050] refers to the fact that the implementer of a hosted device "must provide: a description of the device and its services" and "an implementation of the device's behavior."

The other passage cited by the Examiner (paragraphs [0069-0074]) describes device registration. For instance, Weisman teaches that the Device host publishes complete UPnP device descriptions and mentions two ways that devices can be registered (e.g., either by providing a pointer to a device control object or a CLSID to the Device Host API).

The Examiner's cited passages appear to have no relevance at all to peer-to-peer platform protocols that include a peer membership protocol for use by the peer nodes in applying for membership in one or more of the peer groups. Moreover, Weisman does

not mention anything about a peer membership protocol for use by the peer nodes in applying for membership *in one or more peer groups*.

General descriptions of encapsulating the discovery, description, and control protocols of a peer networking protocol and of device registration, as cited by the Examiner do not disclose the specific limitations recited in claim 20.

Claim 26:

1. The cited art fails to disclose wherein, in said requesting peer routing information, the peer nodes are configured to use the endpoint routing protocol to send route query request messages formatted in accordance with the endpoint routing protocol to one or more router peers to request the peer routing information.

In regards to claim 26, Weisman fails to disclose **wherein, in said requesting peer routing information, the peer nodes are configured to use the *endpoint routing protocol* to send *route* query request messages formatted in accordance with the endpoint routing protocol to one or more router peers to request the peer *routing* information.** The Examiner cites paragraphs [0034], [0050], and [0813] of Weisman. Presumably, the Examiner is relying on Weisman's teachings regarding control points searching for devices of interest using the UPnP-based discovery protocol. However, the Examiner's reliance on Weisman is misplaced.

Contrary to the Examiner's assertion, Weisman's system does not include peer nodes configured to use an endpoint routing protocol to send route query request messages formatted in accordance with the endpoint routing protocol to one or more router peers to request the peer routing information. Instead, Weisman teaches, as demonstrated at the Examiner's cited passages and elsewhere in Weisman, that control points search for devices of interest by multicasting a search message including "a pattern, or target, equal to a type or identifier for a device or service" (paragraph [0930]).

Thus, the subject matter relied on by the Examiner relates to, and refers to, searching for devices or services by type, such as to find a device of interest.

Searching for a device of interest, such as Weisman's control points multicasting a query message with a pattern corresponding to a particular device type, is very different from peer nodes "configured to use an endpoint routing protocol to send *route query request* messages … to one or more router peers to request the peer *routing* information," as recited in Appellants' claim. Weisman does not describe anything about using an endpoint routing protocol to "send route query request messages … to request the peer routing information."

Without some specific teaching by Weisman regarding peer nodes are configured to use the endpoint routing protocol to send route query request messages formatted in accordance with the endpoint routing protocol to one or more router peers to request the peer routing information, the Examiner's reliance on Weisman to anticipate claim 26 is clearly misplaced.

Claim 27:

1. The cited fails to disclose wherein each of the router peers is configured to cache route information for one or more routes in the peer-to-peer environment.

Regarding claim 27, contrary to the Examiner's contention, **Weisman fails to disclose wherein each of the router peers is configured to *cache route information* for** one or more routes in the peer-to-peer environment. The Examiner cites paragraphs [0155] and [0185] of Weisman. However, neither the cited sections nor any other portion of Weisman describes anything about each of the router peers being configured to cache rout information for one or more routes in the peer-to-peer environment.

Instead, the passages cited by the Examiner describe how Weisman's automation proxy object "parses the service description and build[s] two internal tables." One table

stores "the data types of service state variables" and the other stores "the data types of the arguments to the service's actions." See paragraph [0155]. Weisman further teaches, at the Examiner's cited passage, that "these tables store only the names and data types, not values, of the state variables and arguments."

At the Examiner's other cited passage (paragraph [0185]), Weisman teaches that when a hosted device is registered via the Registrar, the device host will need to register this service as an event source, and that part of the registration process involves passing the list of evented state variables and their initial values to the Registrar so that it can be used for the initial event notification message for a new subscriber. Weisman also teaches that the local cache of state variables and their values is updated each time an event notification is generated.

Apparently the Examiner is relying on Weisman's system caching anything, even state variables and values, to disclose the specific limitation of **router peers is configured to *cache route information* for one or more routes in the peer-to-peer environment.** However, caching state variables and their values is not caching route information for one or more routes in the peer-to-peer environment. Weisman is clearly describing the maintaining of generic state variable types and values, not route information for one or more routes.

2. The cited art fails to disclose wherein each of the router peers is further configured to return route information for a particular route specified by a particular route query request message if the route information for the particular route is cached by the particular router peer.

In further regard to claim 27, **Weisman fails to disclose wherein each of the router peers is further configured to return route information <u>for a particular route specified by a particular route query request message</u> if the route information for the particular route is cached by the particular router peer.** In contrast to the Examiner's contention, Weisman's teachings regarding caching state variable types and

values does not disclose anything to do router peers being configured to return route information for a particular route specified by a particular route query request message if the route information for the particular route is cached by the particular route peer.

Weisman does no mention, either at the cited passages or elsewhere, a particular route specified by a particular route query request message or about each router peer being configured to return route information for such a particular route.

Claim 28:

1. The cited art fails to disclose wherein each of the router peers is further configured to forward the route query request message to other router peers if the route information for the particular route is not cached by the particular router peer.

In regard to claim 28, Weisman fails to disclose **wherein each of the router peers is further configured to forward the route query request message to other router peers if the route information for the particular route is not cached by the particular router peer.** The Examiner cites paragraphs [0126] and [0138-0139] of Weisman. The cited passages describe various aspect of Weisman's Service Control API, including how an automation proxy object may "forward[] the [control] request to the hosted device code" and how XML is used for the body of control requests.

Thus, the Examiner is apparently relying on Weisman's teachings about control requests, including the translation and forwarding of SOAP-based control requests by Weisman's automation proxy object. However, Weisman's control requests are not route query request messages. Weisman does not mention anything about determining forwarding a route query request message (or any other message) "if the route information for the particular route is not cached by the particular router peer.

Claim 33:

1. The cited art fails to disclose wherein the common set of services on at least a subset of the peer groups includes a membership service for use by member peer nodes in the peer group to reject or accept group membership applications in accordance with the membership protocol.

Regarding claim 33, **Weisman fails to disclose wherein the common set of services on at least a subset of the peer groups includes a membership service for use by member peer nodes in the peer group to reject or accept group membership applications in accordance with the membership protocol**. The Examiner cites paragraphs [0034], [0050] and [0069-0074] of Weisman. The Examiner appears to be relying on Weisman's device hosting, in general. As described above, paragraph [0034] describes how Weisman's Device Host API enables software modules "to publish themselves as peer networking-enabled devices" and that "The Device Host 100 encapsulates the discovery, description, and control protocols of a peer networking protocol." Paragraph [0050] refers to the fact that the implementer of a hosted device "must provide: a description of the device and its services" and "an implementation of the devices behavior." Paragraphs [0069-0074] describe Weisman's device registration. For instance, Weisman teaches that the Device host publishes complete UPnP device descriptions and mentions two ways that devices can be registered (e.g., either by providing a pointer to a device control object or a CLSID to the Device Host API).

However, the Examiner's cited passage and Weisman's device hosting in general do not have anything to do with a membership service for use by member peer nodes in a peer group *to reject or accept group membership applications* in accordance with the membership protocol. Weisman is completely silent about member peer nodes in a peer group using a membership server to reject or accept group membership applications.

Neither the discovery, description nor control protocols of Weisman's peer networking protocol encapsulated by Device Host 100 include any functionality that can be considered to anticipate a common set of services on at least a subset of the peer

groups includes a membership services for use by member peer nodes in the peer group to reject or accept group membership applications, as recited in Appellants' claim.

Claims 36-38, 40, 42, 45, 47, 48, 49 and 52:

1. The rejection is improper because Weisman is not a prior art reference.

As discussed above regarding claim 1, the Examiner's rejection is improper because Weisman is not a prior art reference. Specifically, the rejection is improper unless the Examiner can show that Weisman's published application has the necessary claim support in the provisional application to be entitled to the provisional application's filing date as its § 102(e) prior art date. *See also* M.P.E.P. § 2136.03(IV). Since the Examiner has not provided the necessary evidence to show that the Weisman publication is prior art to the present application, the current rejection is improper. Please refer to Appellants' arguments and remarks regarding claim 1, above, for a detailed discussion of Weisman not being a prior art reference.

2. The cited art fails to disclose wherein at least one of the one or more peer-to-peer platform protocols is configured to be used by the peer nodes to discover other peer nodes that are members of specified peer groups.

Furthermore, regarding claim 1, even if Weisman did qualify as prior art, **Weisman fails to disclose wherein at least one of the one or more peer-to-peer platform protocols is configured to be used by the peer nodes to discover peer nodes that are members of *specified peer groups*.** However, as noted above regarding the rejection of claim 1, Weisman does not describe or teach anything regarding a peer-to-peer platform protocol configured to be used by the peer nodes to discover peer nodes that are members of specified peer groups. Instead, Weisman teaches a discover protocol that allows hosted devices to broadcast a service advertisement that describes a service provided by the hosted device. (See, e.g., paragraphs [0045], [0839-0844], and [0849]).

Nowhere does Weisman describe a peer-to-peer platform protocol that can be used to discover peer nodes that are members of particular peer groups, as in claim 1.

In response to the above arguments, the Examiner cites paragraphs [0813-0819] and [0838-0847] of Weisman that describes UPnP networking (Advisory Action, Response C). As noted above regarding claim 1, the Examiner does not provide any argument or explanation regarding how this passage can be interpreted to support the Examiner's position even thought nothing in the cited passage mentions any peer-to-peer platform protocols configured to be used by a peer node *to discover peer nodes that are members of specified peer groups*. Weisman is simply silent regarding peer-to-peer platform protocols configured to be used by a peer node to discover peer nodes that are members of specified peer groups.

Moreover, as described above regarding claim 1, Weisman teaches other means for a device to discover other devices that do not involve the specific peer-to-peer platform protocol recited in Appellants' claim. For instance, Weisman describes the discovery protocol in some detail without including a peer-to-peer platform protocol configured to be used by a peer node to discover peer nodes that are members of specified peer groups. For instance, when describing the search query message Weisman teaches using a pattern or target corresponding to a particular device type, for example, but does not describe any way to discover peer nodes that are members of specified peer groups.

Additionally, Appellants' remarks above regarding claim 1 also apply to claim 36.

Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim. *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 221 USPQ 481, 485 (Fed. Cir. 1984). The **identical** invention must be shown in as complete detail as is contained in the claims. *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). Weisman fails to disclose where at least one of the one or more peer-to-peer platform

protocols is configured to be used by the peer nodes to discover peer nodes that are members of specified peer groups.

Claim 44:

1. The cited art fails to disclose wherein the one or more peer-to-peer platform protocols includes a peer membership protocol, wherein the program instructions are further executable to apply for membership in one or more of the peer groups in accordance with the peer membership protocol.

In regard to claim 44, Weisman fails to disclose **wherein the one or more peer-to-peer platform protocols includes a peer membership protocol, wherein the program instructions are further executable to apply for membership in one or more of the peer groups in accordance with the peer membership protocol**. The Examiner does not present a detailed rejection for claim 44, but cites paragraphs [0034], [0050] and [0069-0074] of Weisman in the rejection of claim 20, which recites similar subject matter.

As noted above regarding the rejection of claim 20, The Examiner appears to be relying on Weisman's general description of device hosting. For instance, paragraph [0034] describes Weisman's Device Host API and Device Host 100, while paragraph [0050] refers to the fact that the implementer of a hosted device must provide a description of the device and its services and an implementation of the device's behavior. Appellants' remarks above regarding the rejection of claim 20, above, apply to the rejection of claim 44 as well and present a more detailed discussion the Examiner's cited passages.

Appellants can find no relevance of the Examiner's cited passages appear to a peer membership protocol for use by the peer nodes in applying for membership in one or more of the peer groups. Weisman certainly does not mention anything about a peer

membership protocol for use by the peer nodes in *applying for membership in one or more peer groups*.

Instead, as described above regarding claim 20, Weisman teaches a straightforward registration process and API that does not involve or include a peer membership protocol for use by the peer nodes in applying for membership in one or more of the peer groups, as recited in Appellants' claim. See, e.g., paragraphs [0044-0045].

General descriptions of encapsulating the discovery, description, and control protocols of a peer networking protocol and of device registration, as cited by the Examiner, do not disclose the specific limitations recited in claim 44.

Claim 50:

1. The cited art fails to disclose wherein the program instructions are further executable to discover advertised resources including the other peer nodes and the peer groups in the peer-to-peer environment using the discovery service in accordance with the discovery protocol.

In regards to claim 50, contrary to the Examiner's assertion, **Weisman fails to disclose wherein the program instructions are further executable to discover advertised resources including the other peer nodes and the peer groups in the peer-to-peer environment using the discovery service in accordance with the discovery protocol.** The Examiner does not provide an explicit rejection of claim 50. Instead merely relying the rejection of claims 1-3, 6, 8-13, 15, 17-22, 25-30 and 32-35.

However, Weisman's system does not include discovering advertised resources including the other peer nodes *and the peer groups* in the peer-to-peer environment using the discovery service in accordance with the discovery protocol. Instead, Weisman teaches that the UPnP-based discovery protocol "allows [a] device to *advertise its*

services to control points ..." (emphasis added, paragraph [0849]). Weisman further states, "Through discovery, control points find interesting devices(s)" and that "[d]iscovery enables description (Step 2) where control points learn about device capabilities, control (Step 3) where a control point sends commands to device(s), eventing (Step 4) where control points listen to state changes in device(s), and presentation (Step 5) where control points display a user interface for device(s)" (paragraph [0839]).

Thus, Weisman teaches that the UPnP discovery protocol allows devices to advertise, and hence other devices to discover, their respective services. Weisman fails to mention anything about program instructions executable to discover advertised resources including the other peer nodes and the peer groups in the peer-to-peer environment using the discovery service in accordance with the discovery protocol.

For instance, when describing the contents of advertisement messages sent via the discovery protocol, Weisman teaches that "[t]o advertise the full extent of its capabilities, a device multicasts a number of discovery messages corresponding to each of its embedded devices and services" and that "each message contains information specific to the embedded device (or service) as well as information about its enclosing device" (emphasis added, paragraph [0849]). None of the messages described by Weisman as sent via the discovery protocol includes any information usable for discovering the peer groups.

A discovery protocol for individual devices to advertise their respective capabilities and services is very different from, and does not disclose, a discovery protocol for discovering the peer groups in a peer-to-peer environment. Thus, Weisman teaches a discovery protocol allowing individual devices to advertise their own, individual, capabilities, but fails to disclose wherein the program instructions are further executable to discover advertised resources including the other peer nodes and the peer groups in the peer-to-peer environment using the discovery service in accordance with the discovery protocol.

Claim 51:

1. The cited art fails to disclose wherein the common set of services on at least a subset of the peer groups includes a membership service for use by member peer nodes in the peer group to reject or accept group membership applications in accordance with the membership protocol.

Regarding claim 51, **Weisman fails to disclose wherein the common set of services on at least a subset of the peer groups includes a membership service for use by member peer nodes in the peer group to reject or accept group membership applications in accordance with the membership protocol.** The Examiner does not present and explicit rejection of claim 51, but cites paragraphs [0034], [0050] and [0069-0074] of Weisman regarding claim 33, which recites similar subject matter. The Examiner appears to be relying on Weisman's device hosting, in general. As described above, paragraph [0034] describes how Weisman's Device Host API enables software modules "to publish themselves as peer networking-enabled devices" and that "The Device Host 100 encapsulates the discovery, description, and control protocols of a peer networking protocol." Paragraph [0050] refers to the fact that the implementer of a hosted device "must provide: a description of the device and its services" and "an implementation of the devices behavior." Paragraphs [0069-0074] describe Weisman's device registration. For instance, Weisman teaches that the Device host publishes complete UPnP device descriptions and mentions two ways that devices can be registered (e.g., either by providing a pointer to a device control object or a CLSID to the Device Host API).

However, the Examiner's cited passage and Weisman's device hosting in general do not have anything to do with a membership service for use by member peer nodes in a peer group *to reject or accept group membership applications* in accordance with the membership protocol. Weisman is completely silent about member peer nodes in a peer group using a membership server to reject or accept group membership applications.

Neither the discovery, description nor control protocols of Weisman's peer networking protocol encapsulated by Device Host 100 include any functionality that can be considered to anticipate a common set of services on at least a subset of the peer groups includes a membership services for use by member peer nodes in the peer group to reject or accept group membership applications, as recited in Appellants' claim.

Claims 53 and 54:

1. The Examiner has failed to even attempt to provide a proper *prima facie* rejection

Regarding claim 53, **the Examiner has failed to even attempt to provide a proper *prima facie* rejection of claim 53.** The Examiner merely asserts that claim 53 does "not define or teach any new limitations other than [the] above claims 1-3, 6, 8-13, 15, 17-22, 25-30, and 32-35. However, the Examiner is improperly ignoring both the specific language and the particular limitations of claim 53 that are not recited in any of claims 1-3, 6, 8-13, 15, 17-22, 25-30, and 32-35. For example, none of claims 1-3, 6, 8-13, 15, 17-22, 25-30, and 32-35 recite anything about a node being configured to move from one network location to a different network location, as recited in claim 53.

Thus, the Examiner has clearly failed to provide a proper *prima facie* rejection of claim 53. As noted below, the Examiner has also failed to provide a proper *prima facie* rejection of claims 55, 56, 57, 58, 73, 75, 76, 97, 99, 100, 114, 115 and 116.

2. The cited art fails to disclose wherein the peer node is configured to move from the network location to a different network location; wherein the program instructions are further executable within the peer node to discover and access a different instance of the service on a different one of the plurality of peer nodes.

In further regard to claim 53, Weisman fails to disclose ***wherein the peer node is configured to move from the network location to a different network location; wherein the program instructions are further executable within the peer node to discover and access a different instance of the service on a different one of the plurality of peer nodes***. Claim 53 recites, in part, a peer node discovering and accessing an instance of a service on one of the peer nodes, moving to a different network location and discovering and accessing a *different instance of the service* on a different one of the peer nodes. The Examiner, as noted above, has not cited any portion of Weisman regarding these limitations of claim 53. Moreover, Weisman does not mention anything regarding a node moving to a different network location, as well as discovering and accessing a *different instance of the service on a different one of the plurality of peer nodes*.

Weisman describes the use of a device hosting framework providing hosting for software-implemented logical devices, but is **silent** regarding a peer node configured to move from one network location to a different network location.

The rejection of claim 53 is not supported by the cited art and removal thereof is respectfully requested.

Claim 55:

1. The cited art fails to disclose that the different one of the plurality of peer nodes is operable to provide a unique identifier to the instance of the service hosted by the particular peer node, wherein the unique identifier distinguishes the different one of the plurality of peer nodes from the other peer nodes on the network; wherein the different one of the plurality of peer nodes is operable to move to a different network location; and wherein the instance of the service is operable to recognize the different one of the plurality of peer nodes using the unique identifier and to route information provided by the service to the different one of the plurality of peer nodes at the different network location.

Regarding claim 55, Weisman fails to disclose that ***the different one of the plurality of peer nodes is operable to provide a unique identifier to the instance of the service hosted by the particular peer node, wherein the unique identifier distinguishes the different one of the plurality of peer nodes from the other peer nodes on the network; wherein the different one of the plurality of peer nodes is operable to move to a different network location; and wherein the instance of the service is operable to recognize the different one of the plurality of peer nodes using the unique identifier and to route information provided by the service to the different one of the plurality of peer nodes at the different network location***. Thus, claim 55 recites, part, peer nodes providing access to an instance of service to a different one of the peer nodes. The different peer node is operable to *provide a unique identifier* to the instance of the service and *move to a different network location*. The instance of the service is operable to recognize the different peer node *using the unique identifier* and to route information to the different peer node at the different network address. As with claim 53, discussed above, the Examiner does note cite any portion of Weisman regarding these limitations of claim 55.

Additionally, Weisman does not disclose anything regarding a peer node moving to a different network location. Nor does Weisman disclose anything regarding an instance of a service using a unique identifier provided by a peer node to recognize the peer node at a different network location and to route information to the different peer node at the different network address. The Examiner, regarding claim 35, relies on Weisman's UDN as a unique identifier. However, Weisman fails to disclose an instance of a service using the UDN to recognize a device that has moved to a different network location. In fact, as noted above, Weisman fails to disclose a node or device *moving to a different network location*.

2. The cited art teaches away from Appellants' claim.

Furthermore, Weisman teaches, "[t]he foundation for UPnP networking is IP addressing" and that each device obtains an IP address either from a DHCP server or via

an AutoIP process that "defines how a device intelligently chooses an IP address from a set of reserved addresses ..." (paragraph [0812]). Weisman clearly teaches the use of IP addresses which clearly cannot be used by an instance of the service to *recognize a peer node at a different network location* to which the peer node has moved, as recited in claim 55. Thus, Weisman ***teaches away*** from an instance of a service using a unique identifier provided by a peer node to recognize that peer node at a different network address to which the peer node has moved.

Thus, for at least the reasons above, the rejection of claim 55 is not supported by the cited art and removal thereof is respectfully requested.

Claim 56:

1. The cited art fails to disclose that the different one of the plurality of peer nodes is operable to provide a unique identifier to the instance of the service hosted by the particular peer node, wherein the unique identifier distinguishes the different one of the plurality of peer nodes from the other peer nodes on the network; wherein the different one of the plurality of peer nodes is operable to move to a different network location; and wherein the instance of the service is operable to recognize the different one of the plurality of peer nodes using the unique identifier and to route information provided by the service to the different one of the plurality of peer nodes at the different network location.

Regarding claim 56, Weisman fails to disclose that ***the different one of the plurality of peer nodes is operable to provide a unique identifier to the instance of the service hosted by the particular peer node, wherein the unique identifier distinguishes the different one of the plurality of peer nodes from the other peer nodes on the network; wherein the different one of the plurality of peer nodes is operable to move to a different network location; and wherein the instance of the service is operable to recognize the different one of the plurality of peer nodes using the unique identifier***

and to route information provided by the service to the different one of the plurality of peer nodes at the different network location.

Additionally, Weisman does not disclose anything regarding a peer node moving to a different network location. Nor does Weisman disclose anything regarding an instance of a service using a unique identifier provided by a peer node to recognize the peer node at a different network location and to route information to the different peer node at the different network address. The Examiner, regarding claim 35, relies on Weisman's UDN as a unique identifier. However, Weisman fails to disclose an instance of a service using the UDN to recognize a device that has moved to a different network location. In fact, as noted above, Weisman fails to disclose a node or device *moving to a different network location*.

2. The cited art teaches away from Appellants' claim.

Furthermore, Weisman teaches, "[t]he foundation for UPnP networking is IP addressing" and that each device obtains an IP address either from a DHCP server or via an AutoIP process that "defines how a device intelligently chooses an IP address from a set of reserved addresses ..." (paragraph [0812]). Weisman clearly teaches the use of IP addresses which clearly cannot be used by an instance of the service to *recognize a peer node at a different network location* to which the peer node has moved, as recited in claim 56. Thus, Weisman ***teaches away*** from an instance of a service using a unique identifier provided by a peer node to recognize that peer node at a different network address to which the peer node has moved.

Claim 57:

1. The cited art fails to disclose wherein each of the plurality of peer nodes is configured to: discover and access an instance of the content on one of the at least a subset of the plurality of peer nodes ... move from the network location to a

different network location; discover and access a different instance of the content on a different one of the at least a subset of the plurality of peer nodes.

In regard to claim 57, Weisman fails to disclose **wherein each of the plurality of peer nodes is configured to: discover and access an instance of the content on one of the at least a subset of the plurality of peer nodes, … move from the network location to a different network location; discover and access a *different instance* of the content on a different one of the at least a subset of the plurality of peer nodes**.

As with many of the claims the Examiner does not provide an explicit rejection, but relies on the rejection of other claims. Contrary to the Examiner's assertion however, Weisman describes the use of a device hosting framework providing hosting for software-implemented logical devices, but does is silent regarding a peer node configured to move from one network location to a different network location. Moreover, as argued above, Weisman is silent regarding a node moving to a different network location, as well as discovering and accessing a *different instance of the service on a different one of the plurality of peer nodes*. Please refer to the discussion of claims 53 and 55 above for a more detailed discussion of Weisman's failure to teach anything regarding a device or node moving to a different network location as Appellant remarks regarding claims 53 and 55 also apply to claim 57.

Thus, for at least the reasons presented above, the rejection of claim 57 is not supported by the cited art.

Claim 58:

1. The cited art fails to disclose wherein each of the plurality of peer nodes is configured to: discover and access an instance of the content on one of the at least a subset of the plurality of peer nodes, … move from the network location to a different network location; discover and access a different instance of the content on a different one of the at least a subset of the plurality of peer nodes.

In regard to claim 58, Weisman fails to disclose **wherein each of the plurality of peer nodes is configured to: discover and access an instance of the content on one of the at least a subset of the plurality of peer nodes, ... move from the network location to a different network location; discover and access a *different instance* of the content on a different one of the at least a subset of the plurality of peer nodes**.

Instead, Weisman describes the use of a device hosting framework providing hosting for software-implemented logical devices, but does is silent regarding a peer node configured to move from one network location to a different network location.

Moreover, as argued above regarding claims 53, 55 and 57, Weisman is silent regarding a node moving to a different network location, as well as discovering and accessing a *different instance of the service on a different one of the plurality of peer nodes*. Please refer to the discussion of claims 53, 55 and 57 above for a more detailed discussion of Weisman's failure to teach anything regarding a device or node moving to a different network location.

Claims 59-70 and 72:

1. The rejection is improper because Weisman is not a prior art reference.

As discussed above regarding claim 1, the Examiner's rejection is improper because Weisman is not a prior art reference. Specifically, the rejection is improper unless the Examiner can show that Weisman's published application has the necessary claim support in the provisional application to be entitled to the provisional application's filing date as its § 102(e) prior art date. *See also* M.P.E.P. § 2136.03(IV). Since the Examiner has not provided the necessary evidence to show that the Weisman publication is prior art to the present application, the current rejection is improper. Please refer to

Appellants' arguments and remarks regarding claim 1, above, for a detailed discussion of Weisman not being a prior art reference.

2. The cited art fails to disclose wherein at least one of the one or more peer-to-peer platform protocols is configured to be used by a peer node to discover peer nodes that are members of specified peer groups.

Furthermore, regarding claim 1, even if Weisman did qualify as prior art, **Weisman fails to disclose** ***wherein at least one of the one or more peer-to-peer platform protocols is configured to be used by a peer node to discover peer nodes that are members of specified peer groups.*** Weisman teaches a device hosting framework that provides hosting for software-implemented logical devices on a computer to expose their services as controlled devices per a peer networking protocol. Weisman's device hosting framework encapsulates discovery, description and control protocol operations so that developers do not have to individually implement the peer networking protocol in every logical device.

However, Weisman does not describe or teach anything regarding a peer-to-peer platform protocol configured to be used to discover peer nodes that are members of specified peer groups. Instead, Weisman teaches a discover protocol that allows hosted devices to broadcast a service advertisement that describes a service provided by the hosted device. (See, e.g., paragraphs [0045], [0839-0844], and [0849]). Nowhere does Weisman describe a peer-to-peer platform protocol that can be used to discover peer nodes that are members of particular peer groups, as in claim 1.

In response to the above arguments, the Examiner cites paragraphs [0813-0819] and [0838-0847] of Weisman that describes UPnP networking (Advisory Action, Response C). The Examiner does not provide any argument or explanation regarding how this passage can be interpreted to support the Examiner's position. Nothing in the cited passage mentions any peer-to-peer platform protocols configured to be used by a peer node *to discover peer nodes that are members of specified peer groups.* Weisman,

at the Examiner's cited passage, describes two methods for one device to discover another in Weisman's system. In contrast to the Examiner's contention, Weisman teaches that "a control point may learn of a device of interest because that device sent discovery messages advertising itself or because the device responded to a discovery message searching for devices." Thus, not only is Weisman silent regarding peer-to-peer platform protocols configured to be used by a peer node to discover peer nodes that are members of specified peer groups, Weisman teaches other means for a device to discover other devices that does not involve the specific peer-to-peer platform protocol recited in Appellants' claim.

In the Final Office Action, in response to the above arguments (response C), the Examiner asserts that "Applicants' argument is inconsistent with claims. This/these limitation(s) are not found in the claims", referring to the Applicants' argument that Weisman fails to disclose "*wherein at least one of the one or more peer-to-peer platform protocols is configured to be used by a peer node to discover* ***other*** *peer nodes that are members of specified peer groups.*" Claim 1 recites "*wherein at least one of the one or more peer-to-peer platform protocols is configured to be used by a peer node to discover peer nodes that are members of specified peer groups.*" The only difference between the two clauses is that the first clause includes the word **other**. Appellants' argument was simply pointing out the clear meaning of the claims. By definition discovery requires that something that is "other" than the discoverer is discovered. A peer node using a peer-to-peer platform to discover peer nodes that are members of specified peer groups must by definition discover other peer nodes. No "disclosure claimed in the specification" was read into the claims for the purpose of avoiding prior art, as the Examiner erroneously alleges. Moreover, Weisman simply does not teach that *at least one of the one or more peer-to-peer platform protocols is configured to be used by a peer node to discover peer nodes that are members of specified peer groups*.

Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim. *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 221 USPQ 481, 485 (Fed. Cir.

1984). The **identical** invention must be shown in as complete detail as is contained in the claims. *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). Weisman fails to disclose where at least one of the one or more peer-to-peer platform protocols is configured to be used by a peer node to discover peer nodes that are members of specified peer groups.

Claim 71:

1. The cited art does not disclose means for member peer nodes in a peer group to receive and reject or accept group membership applications.

Regarding claim 71, **Weisman fails to disclose means for member peer nodes in a peer group to receive and reject or accept group membership applications**. The Examiner cites paragraphs [0034], [0050] and [0069-0074] of Weisman. The Examiner appears to be relying on Weisman's device hosting, in general. As described above, paragraph [0034] describes how Weisman's Device Host API enables software modules "to publish themselves as peer networking-enabled devices" and that "The Device Host 100 encapsulates the discovery, description, and control protocols of a peer networking protocol." Paragraph [0050] refers to the fact that the implementer of a hosted device "must provide: a description of the device and its services" and "an implementation of the devices behavior." Paragraphs [0069-0074] describe Weisman's device registration. For instance, Weisman teaches that the Device host publishes complete UPnP device descriptions and mentions two ways that devices can be registered (e.g., either by providing a pointer to a device control object or a CLSID to the Device Host API).

However, the Examiner's cited passage and Weisman's device hosting in general do not have anything to do with a membership service for use by member peer nodes in a peer group *to reject or accept group membership applications* in accordance with the membership protocol. Weisman is completely silent about member peer nodes in a peer group using a membership server to reject or accept group membership applications.

Neither the discovery, description nor control protocols of Weisman's peer networking protocol encapsulated by Device Host 100 include any functionality that can be considered to anticipate a common set of services on at least a subset of the peer groups includes a membership services for use by member peer nodes in the peer group to reject or accept group membership applications, as recited in Appellants' claim.

Claims 73 and 74:

1. The cited art does not disclose wherein each of the plurality of peer nodes is operable to move to a different network location; and means for each of the plurality of peer nodes to discover and access a different instance of the service provided by a different one of the at least a subset of the plurality of peer nodes, wherein the one of the at least a subset of the plurality of peer nodes is local to the different network location of the particular one of the plurality of peer nodes.

Regarding claim 73, **Weisman fails to disclose wherein each of the plurality of peer nodes is operable to move to a different network location; and means for each of the plurality of peer nodes to discover and access a different instance of the service provided by a different one of the at least a subset of the plurality of peer nodes, wherein the one of the at least a subset of the plurality of peer nodes is local to the different network location of the particular one of the plurality of peer nodes.**

Firstly, as argued above regarding several of Appellants' claims (e.g., 53, 55, 57 and 58) Weisman does not disclose anything regarding a peer node *moving to a different network location*. Instead, Weisman describes the use of a device hosting framework providing hosting for software-implemented logical devices, but does is silent regarding a peer node configured to move from one network location to a different network location. Moreover, Weisman is silent regarding a node moving to a different network location, as well as discovering and accessing a *different instance of the service on a different one of the plurality of peer nodes*.

Additionally, Weisman further fails to disclose anything about each of the plurality of peer nodes discovering and accessing a different instance of the service provided by a different one of the at least a subset of the plurality of peer nodes, as recited in Appellants' claim. For instance, the Examiner does not cite any portion of Weisman (regarding any of the claims) that describes a peer node moving to a *different* network address and discovering and accessing a *different* instance of the service provided by a *different* one of the at least a subset of the plurality of peer nodes.

Claim 75:

1. The cited art fails to disclose that the different one of the plurality of peer nodes is operable to provide a unique identifier to the instance of the service hosted by the particular peer node, wherein the unique identifier distinguishes the different one of the plurality of peer nodes from the other peer nodes on the network; wherein the different one of the plurality of peer nodes is operable to move to a different network location; and wherein the instance of the service is operable to recognize the different one of the plurality of peer nodes using the unique identifier and to route information provided by the service to the different one of the plurality of peer nodes at the different network location.

Regarding claim 56, Weisman fails to disclose that ***the different one of the plurality of peer nodes is operable to provide a unique identifier to the instance of the service hosted by the particular peer node, wherein the unique identifier distinguishes the different one of the plurality of peer nodes from the other peer nodes on the network; wherein the different one of the plurality of peer nodes is operable to move to a different network location; and wherein the instance of the service is operable to recognize the different one of the plurality of peer nodes using the unique identifier and to route information provided by the service to the different one of the plurality of peer nodes at the different network location***.

Contrary to the Examiner contention, and as argued above, Weisman does not disclose anything regarding a peer node *moving to a different network location*. Nor does Weisman disclose anything regarding an instance of a service using a unique identifier provided by a peer node to recognize the peer node at a different network location and to route information to the different peer node at the different network address. The Examiner, regarding claim 35, relies on Weisman's UDN as a unique identifier. However, Weisman fails to disclose an instance of a service using the UDN to recognize a device that has moved to a different network location. In fact, as noted above, Weisman fails to disclose a node or device *moving to a different network location*.

2. The cited art teaches away from Appellants' claim.

Furthermore, Weisman teaches, "[t]he foundation for UPnP networking is IP addressing" and that each device obtains an IP address either from a DHCP server or via an AutoIP process that "defines how a device intelligently chooses an IP address from a set of reserved addresses ..." (paragraph [0812]). Weisman clearly teaches the use of IP addresses which clearly cannot be used by an instance of the service to *recognize a peer node at a different network location* to which the peer node has moved, as recited in claim 75. Thus, Weisman ***teaches away*** from an instance of a service using a unique identifier provided by a peer node to recognize that peer node at a different network address to which the peer node has moved.

Claim 76:

1. The cited art fails to disclose wherein each of the plurality of peer nodes is configured to: discover and access an instance of the content on one of the at least a subset of the plurality of peer nodes, wherein the one of the at least a subset of the plurality of peer nodes is local to a network location of the particular peer node on the network, wherein said discovering and accessing the instance of the content is performed in accordance with the one or more peer-to-peer platform protocols; move from the network location to a different network location; discover and access

a different instance of the content on a different one of the at least a subset of the plurality of peer nodes.

In regard to claim 76, Weisman fails to disclose **wherein each of the plurality of peer nodes is configured to: discover and access an instance of the content on one of the at least a subset of the plurality of peer nodes, wherein the one of the at least a subset of the plurality of peer nodes is local to a network location of the particular peer node on the network, wherein said discovering and accessing the instance of the content is performed in accordance with the one or more peer-to-peer platform protocols; move from the network location to a different network location; discover and access a *different instance* of the content on a different one of the at least a subset of the plurality of peer nodes**. Weisman describes the use of a device hosting framework providing hosting for software-implemented logical devices, but does is silent regarding a peer node configured to move from one network location to a different network location. Moreover, Weisman is silent regarding a node moving to a different network location, as well as discovering and accessing a *different instance of the service on a different one of the plurality of peer nodes*. Please refer to the discussion of claims 53, 55, 57, and 58 above for a more detailed discussion of Weisman's failure to teach anything regarding a device or node moving to a different network location.

Claims 77, 78, 80-82, 84-90, 92-95:

1. The rejection is improper because Weisman is not a prior art reference.

As discussed above regarding claim 1, the Examiner's rejection is improper because Weisman is not a prior art reference. Specifically, the rejection is improper unless the Examiner can show that Weisman's published application has the necessary claim support in the provisional application to be entitled to the provisional application's filing date as its § 102(e) prior art date. *See also* M.P.E.P. § 2136.03(IV). Since the Examiner has not provided the necessary evidence to show that the Weisman publication

is prior art to the present application, the current rejection is improper. Please refer to Appellants' arguments and remarks regarding claim 1, above, for a detailed discussion of Weisman not being a prior art reference.

2. The cited art fails to disclose wherein at least one of the one or more peer-to-peer platform protocols is configured to be used by a peer node to discover peer nodes that are members of specified peer groups.

Furthermore, regarding claim 77, even if Weisman did qualify as prior art, **Weisman fails to disclose *wherein at least one of the one or more peer-to-peer platform protocols is configured to be used by a peer node to discover peer nodes that are members of specified peer groups*.** Weisman teaches a device hosting framework that provides hosting for software-implemented logical devices on a computer to expose their services as controlled devices per a peer networking protocol. Weisman's device hosting framework encapsulates discovery, description and control protocol operations so that developers do not have to individually implement the peer networking protocol in every logical device.

However, Weisman does not describe or teach anything regarding a peer-to-peer platform protocol configured to be used to discover peer nodes that are members of specified peer groups. Instead, Weisman teaches a discover protocol that allows hosted devices to broadcast a service advertisement that describes a service provided by the hosted device. (See, e.g., paragraphs [0045], [0839-0844], and [0849]). Nowhere does Weisman describe a peer-to-peer platform protocol that can be used to discover peer nodes that are members of particular peer groups, as in claim 1.

In response to the above arguments, the Examiner cites paragraphs [0813-0819] and [0838-0847] of Weisman that describes UPnP networking (Advisory Action, Response C). As described above regarding the rejection of claim 1, the Examiner does not provide any argument or explanation regarding how this passage can be interpreted to support the Examiner's position. Nothing in the cited passage mentions any peer-to-peer

platform protocols configured to be used by a peer node *to discover peer nodes that are members of specified peer groups.* Weisman, at the Examiner's cited passage, describes two methods for one device to discover another in Weisman's system. In contrast to the Examiner's contention, Weisman teaches that "a control point may learn of a device of interest because that device sent discovery messages advertising itself or because the device responded to a discovery message searching for devices." Thus, not only is Weisman silent regarding peer-to-peer platform protocols configured to be used by a peer node to discover peer nodes that are members of specified peer groups, Weisman teaches other means for a device to discover other devices that does not involve the specific peer-to-peer platform protocol recited in Appellants' claim.

In the Final Office Action, in response to the above arguments (response C), the Examiner asserts that "Applicants' argument is inconsistent with claims. This/these limitation(s) are not found in the claims", referring to the Applicants' argument that Weisman fails to disclose "*wherein at least one of the one or more peer-to-peer platform protocols is configured to be used by a peer node to discover* ***other*** *peer nodes that are members of specified peer groups."* Claim 1 recites "*wherein at least one of the one or more peer-to-peer platform protocols is configured to be used by a peer node to discover peer nodes that are members of specified peer groups.*" The only difference between the two clauses is that the first clause includes the word **other**. Appellants' argument was simply pointing out the clear meaning of the claims. By definition discovery requires that something that is "other" than the discoverer is discovered. A peer node using a peer-to-peer platform to discover peer nodes that are members of specified peer groups must by definition discover other peer nodes. No "disclosure claimed in the specification" was read into the claims for the purpose of avoiding prior art, as the Examiner erroneously alleges. Moreover, Weisman simply does not teach that *at least one of the one or more peer-to-peer platform protocols is configured to be used by a peer node to discover peer nodes that are members of specified peer groups*.

Claim 79:

1. The cited art does not disclose another per node applying for membership in the peer group using the membership service and one or more member peer nodes determining if the other peer node is qualified for membership in the peer group in response to the application for membership using the membership service.

Regarding claim 79, **Weisman fails to disclose another per node applying for membership in the peer group using the membership service and one or more member peer nodes determining if the other peer node is qualified for membership in the peer group in response to the application for membership using the membership service.** The Examiner does not attempt to provide a *prima facie* rejection of claim 79. Instead, the Examiner merely states that claim 79 is rejected, and relies on the rejections of claims 1-3, 6, 8-13, 15, 17-22, 25-30, and 32-35. However, none of claims 1-3, 6, 8-13, 15, 17-22, 25-30, and 32-35 recite anything about member peer nodes determining if the other peer node is qualified for membership in the peer group in response to the application for membership, as recited in claim 79.

Moreover, Weisman is completely silent regarding member peer nodes determining if another peer node is qualified for membership the peer group. For example, Weisman does not discuss any qualifications that could be used by member peer nodes for determining if the other peer node is qualified for membership in the peer node. Instead, as described above, Weisman teaches a straightforward registration process that does not involve anything that can be considered to disclose member peer nodes determining if another peer node is qualified for membership the peer group in response to the application for membership using the membership service.

The rejection of claim 79 is not supported by the cited art and removal thereof is respectfully requested.

Claim 83:

1. The cited art fails to disclose one of the peer nodes broadcasting a peer group discovery message in the peer-to-peer environment using the discovery service.

Regarding claim 83, **Weisman fails to disclose one of the peer nodes broadcasting a peer group discovery message in the peer-to-peer environment using the discovery service.** As discussed above, Weisman's discovery protocol only advertises, and therefore only has messages regarding, adverting individual devices and their services, not peer groups. Weisman does not describe any peer group discovery message and clearly fails to disclose one of the peer nodes broadcasting a peer group discovery message in the peer-to-peer environment using the discovery service, as recited in Appellants' claim.

2. The cited art fails to disclose the one of the plurality of peer nodes receiving a peer group response message in response to the peer group discovery message from each of one or more of the peer groups in the peer-to-peer environment, wherein the peer group response messages each include information about a particular peer group, wherein the information is configured for use by the one of the plurality of peer nodes in joining the particular peer group.

Regarding claim 83, **Weisman fails to disclose the one of the plurality of peer nodes receiving a peer group response message in response to the peer group discovery message from each of one or more of the peer groups in the peer-to-peer environment, wherein the peer group response messages each include information about a particular peer group, wherein the information is configured for use by the one of the plurality of peer nodes in joining the particular peer group.**

As noted above regarding claims 10 and 11, Weisman use and description of the UPnP-based discovery protocol does not define any sort of peer group advertisement format. Additionally, Weisman fails to mention, nor does Weisman's system include,

peer group advertisements and clearly fails to include where discovering peer groups returns one or more peer group advertisements.

Weisman lists a number of discovery messages or advertisements, but none can be considered the group advertisements recited in Appellants' claim. For instance, Weisman teaches that to advertise its capabilities, a device multicasts three discovery messages for the root device, two messages for each embedded device and one for each service. Weisman further teaches that, for example, if a root device has *d* embedded devices and *s* embedded services, but only *k* distinct service types, then "3+2d+k" discovery messages would "advertise[] the full extent of the device's capabilities" (paragraph [0860]). Thus, even when listing the total number of messages to be sent out during discovery/advertisement, Weisman does not mention anything about group advertisement or discovery.

Thus, the Examiner's reliance on Weisman regarding claim 83 is misplaced.

Claim 96:

1. The cited art fails to disclose a peer node not in one of the peer groups applying for membership in the peer group and the member peer nodes of the peer group rejecting or accepting the peer node's group membership application using the membership service.

Regarding claim 96, **Weisman fails to disclose a peer node not in one of the peer groups applying for membership in the peer group and the member peer nodes of the peer group rejecting or accepting the peer node's group membership application using the membership service**. The Examiner cites (regarding claim 33) paragraphs [0034], [0050] and [0069-0074] of Weisman. The Examiner appears to be relying on Weisman's device hosting, in general. As described above, paragraph [0034] describes how Weisman's Device Host API enables software modules "to publish themselves as peer networking-enabled devices" and that "The Device Host 100

encapsulates the discovery, description, and control protocols of a peer networking protocol." Paragraph [0050] refers to the fact that the implementer of a hosted device "must provide: a description of the device and its services" and "an implementation of the devices behavior." Paragraphs [0069-0074] describe Weisman's device registration. For instance, Weisman teaches that the Device host publishes complete UPnP device descriptions and mentions two ways that devices can be registered (e.g., either by providing a pointer to a device control object or a CLSID to the Device Host API).

However, the Examiner's cited passage and Weisman's device hosting in general do not have anything to do with a membership service for use by member peer nodes in a peer group *to reject or accept group membership applications* in accordance with the membership protocol. Weisman is completely silent about member peer nodes in a peer group using a membership server to reject or accept group membership applications.

Neither the discovery, description nor control protocols of Weisman's peer networking protocol encapsulated by Device Host 100 include any functionality that can be considered to anticipate a common set of services on at least a subset of the peer groups includes a membership services for use by member peer nodes in the peer group to reject or accept group membership applications, as recited in Appellants' claim.

Claims 97 and 98:

1. The cited art fails to disclose the peer node moving from the network location to a different network location and the peer node discovering a different instance of the service on a different one of the plurality of peer nodes, wherein the different one of the plurality of peer nodes is local to the different network location.

Regarding claim 97, Weisman fails to disclose **the peer node moving from the network location to a different network location and the peer node discovering a different instance of the service on a different one of the plurality of peer nodes, wherein the different one of the plurality of peer nodes is local to the different**

network location. As noted above, Weisman describes the use of a device hosting framework providing hosting for software-implemented logical devices, but does is silent regarding a peer node configured to move from one network location to a different network location. Moreover, Weisman is silent regarding a node moving to a different network location, as well as discovering and accessing a *different instance of the service on a different one of the plurality of peer nodes*. Please refer to the discussion of claims 53, 55, 57 and 58 above for a more detailed discussion of Weisman's failure to teach anything regarding a device or node moving to a different network location.

Thus, the Examiner's reliance on Weisman regarding the rejection of claim 97 is misplaced and the rejection is unsupported by the cited art.

Claim 99:

1. The cited art fails to disclose the peer node providing a unique identifier for the peer node to the instance of the service, wherein the unique identifier distinguishes the peer node from the other peer nodes on the network; the peer node moving from the network location to a different network location; and the instance of the service recognizing the peer node using the unique identifier and routing information to the peer node at the different network location.

Regarding claim 99, **Weisman fails to disclose the peer node providing a unique identifier for the peer node to the instance of the service, wherein the unique identifier distinguishes the peer node from the other peer nodes on the network; the peer node moving from the network location to a different network location; and the instance of the service recognizing the peer node using the unique identifier and routing information to the peer node at the different network location**.

As argued above regarding several of Appellants' claims (e.g., 53, 55, 57 and 58) Weisman does not disclose anything regarding a peer node *moving to a different network location*. Nor does Weisman disclose anything regarding an instance of a service using a

unique identifier provided by a peer node to recognize the peer node at a different network location and to route information to the different peer node at the different network address. The Examiner, regarding claim 35, relies on Weisman's UDN as a unique identifier. However, Weisman fails to disclose an instance of a service using the UDN to recognize a device that has moved to a different network location. In fact, as noted above, Weisman fails to disclose a node or device *moving to a different network location*.

2. The cited art teaches away from Appellants' claim.

Furthermore, Weisman teaches, "[t]he foundation for UPnP networking is IP addressing" and that each device obtains an IP address either from a DHCP server or via an AutoIP process that "defines how a device intelligently chooses an IP address from a set of reserved addresses ..." (paragraph [0812]). Weisman clearly teaches the use of IP addresses which clearly cannot be used by an instance of the service to *recognize a peer node at a different network location* to which the peer node has moved, as recited in claim 99. Thus, **Weisman *teaches away*** from an instance of a service using a unique identifier provided by a peer node to recognize that peer node at a different network address to which the peer node has moved.

Claim 100:

1. The cited art fails to disclose wherein each of the plurality of peer nodes is configured to: discover and access an instance of the content on one of the at least a subset of the plurality of peer nodes, wherein the one of the at least a subset of the plurality of peer nodes is local to a network location of the particular peer node on the network, wherein said discovering and accessing the instance of the content is performed in accordance with the one or more peer-to-peer platform protocols; move from the network location to a different network location; discover and access a different instance of the content on a different one of the at least a subset of the plurality of peer nodes.

In regard to claim 100, Weisman fails to disclose **wherein each of the plurality of peer nodes is configured to: discover and access an instance of the content on one of the at least a subset of the plurality of peer nodes, wherein the one of the at least a subset of the plurality of peer nodes is local to a network location of the particular peer node on the network, wherein said discovering and accessing the instance of the content is performed in accordance with the one or more peer-to-peer platform protocols; move from the network location to a different network location; discover and access a *different instance of the content* on a different one of the at least a subset of the plurality of peer nodes.**

As argued above regarding several of Appellants' claims (e.g., 53, 55, 57 and 58) Weisman does not disclose anything regarding a peer node *moving to a different network location*. Instead, Weisman describes the use of a device hosting framework providing hosting for software-implemented logical devices, but does is silent regarding a peer node configured to move from one network location to a different network location. Moreover, Weisman is silent regarding a node moving to a different network location, as well as discovering and accessing a *different instance of the service on a different one of the plurality of peer nodes*.

Furthermore, the Examiner has not even attempted to provide prima facie rejection of claim 100, instead relying on the rejection of claims that recite different subject matter from that recited in claim 100 (Final Action, p. 14).

Please refer to the discussion of claims 53 and 55 above for a more detailed discussion of Weisman's failure to teach anything regarding a device or node moving to a different network location.

Weisman is further silent regarding a peer node configured to move from the network location to a different network location, discover and access a different instance of the content on a different one of the at least a subset of the plurality of peer nodes.

The Examiner has not cited any portion of cited art regarding any of Appellants' claim that discloses a peer node configured to move from the network location to a different network location, discover and access a different instance of the content on a different one of the at least a subset of the plurality of peer nodes, as recited in claim 100. Thus, not only has the Examiner failed to even attempt to state a *prima facie* rejection of claim 100, the rejection is unsupported by the cited art.

Claims 101 – 107, 109-112:

1. The rejection is improper because Weisman is not a prior art reference.

As discussed above regarding claim 1, the Examiner's rejection is improper because Weisman is not a prior art reference. Specifically, the rejection is improper unless the Examiner can show that Weisman's published application has the necessary claim support in the provisional application to be entitled to the provisional application's filing date as its § 102(e) prior art date. *See also* M.P.E.P. § 2136.03(IV). Since the Examiner has not provided the necessary evidence to show that the Weisman publication is prior art to the present application, the current rejection is improper. Please refer to Appellants' arguments and remarks regarding claim 1, above, for a detailed discussion of Weisman not being a prior art reference.

2. The cited art fails to disclose wherein at least one of the one or more peer-to-peer platform protocols is configured to be used by a peer node to discover peer nodes that are members of specified peer groups.

Furthermore, regarding claim 101, even if Weisman did qualify as prior art, **Weisman fails to disclose *wherein at least one of the one or more peer-to-peer platform protocols is configured to be used by a peer node to discover peer nodes that are members of specified peer groups.*** Weisman teaches a device hosting framework that provides hosting for software-implemented logical devices on a computer to expose

their services as controlled devices per a peer networking protocol. Weisman's device hosting framework encapsulates discovery, description and control protocol operations so that developers do not have to individually implement the peer networking protocol in every logical device.

However, Weisman does not describe or teach anything regarding a peer-to-peer platform protocol configured to be used to discover peer nodes that are members of specified peer groups. Instead, Weisman teaches a discover protocol that allows hosted devices to broadcast a service advertisement that describes a service provided by the hosted device. (See, e.g., paragraphs [0045], [0839-0844], and [0849]). Nowhere does Weisman describe a peer-to-peer platform protocol that can be used to discover peer nodes that are members of particular peer groups, as in claim 1.

In response to the above arguments, the Examiner cites paragraphs [0813-0819] and [0838-0847] of Weisman that describes **UPnP** networking (Advisory Action, Response C). The Examiner does not provide any argument or explanation regarding how this passage can be interpreted to support the Examiner's position. Nothing in the cited passage mentions any peer-to-peer platform protocols configured to be used by a peer node *to discover peer nodes that are members of specified peer groups.* Weisman, at the Examiner's cited passage, describes two methods for one device to discover another in Weisman's system. In contrast to the Examiner's contention, Weisman teaches that "a control point may learn of a device of interest because that device sent discovery messages advertising itself or because the device responded to a discovery message searching for devices." Thus, not only is Weisman silent regarding peer-to-peer platform protocols configured to be used by a peer node to discover peer nodes that are members of specified peer groups, Weisman teaches other means for a device to discover other devices that does not involve the specific peer-to-peer platform protocol recited in Appellants' claim.

In the Final Office Action, in response to the above arguments (response C), the Examiner asserts that "Applicants' argument is inconsistent with claims. This/these

limitation(s) are not found in the claims", referring to the Applicants' argument that Weisman fails to disclose "*wherein at least one of the one or more peer-to-peer platform protocols is configured to be used by a peer node to discover* ***other*** *peer nodes that are members of specified peer groups.*" Claim 1 recites "*wherein at least one of the one or more peer-to-peer platform protocols is configured to be used by a peer node to discover peer nodes that are members of specified peer groups.*" The only difference between the two clauses is that the first clause includes the word **other**. Appellants' argument was simply pointing out the clear meaning of the claims. By definition discovery requires that something that is "other" than the discoverer is discovered. A peer node using a peer-to-peer platform to discover peer nodes that are members of specified peer groups must by definition discover other peer nodes. No "disclosure claimed in the specification" was read into the claims for the purpose of avoiding prior art, as the Examiner erroneously alleges. Moreover, Weisman simply does not teach that *at least one of the one or more peer-to-peer platform protocols is configured to be used by a peer node to discover peer nodes that are members of specified peer groups*.

Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim. *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 221 USPQ 481, 485 (Fed. Cir. 1984). The **identical** invention must be shown in as complete detail as is contained in the claims. *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). Weisman fails to disclose where at least one of the one or more peer-to-peer platform protocols is configured to be used by a peer node to discover peer nodes that are members of specified peer groups.

Claim 108:

1. The cited art does not disclose wherein the one or more peer-to-peer platform protocols include a pipe binding protocol for use in finding the physical location of a pipe endpoint and in binding to the pipe endpoint.

In regards to claim 108, **Weisman fails to disclose wherein the one or more peer-to-peer platform protocols include a pipe binding protocol for use in finding the physical location of a pipe endpoint and in binding to the pipe endpoint.**

The Examiner does not provide a *prima facie* rejection of claim 108 – instead relying on the rejection of other claims that do not recite the same subject matter as recited in claim 108. See, Final Action, p. 14.

Moreover, the Examiner, in the rejection of claim 4, admits that Weisman does not teach anything about pipes and relies on Ferguson. However, the Examiner asserts that claim 108 is anticipated by Weisman even though Weisman does not mention anything about a pipe binding protocol for use in finding the physical location of a pipe endpoint and in binding to the pipe endpoint. Specifically, in the rejection of claim 4, the Examiner admits that Weisman does not teach "wherein the pipes are communications channels between one or more of the peer nodes, the core services, the other services and the applications in the peer-to-peer environment, and wherein the pipe endpoints are network interfaces on the peer nodes that are configured to be bound to the pipes to establish the communications channels" (Final Action, p. 15).

Appellants fail to see how Weisman can be considered disclose a pipe binding protocol for use in finding the physical location of a pipe endpoint and in binding to the pipe endpoint if Weisman fails to teach anything about pipes in general, as admitted by the Examiner.

Thus, even according to the Examiner's position, Weisman fails to disclose wherein the one wherein the one or more peer-to-peer platform protocols include a pipe binding protocol for use in finding the physical location of a pipe endpoint and in binding to the pipe endpoint, as recited in Appellants' claim.

Claim 113:

1. The cited art fails to disclose wherein the common set of services on at least a subset of the peer groups includes a membership service for use by member peer nodes in the peer group to reject or accept group membership applications, wherein the membership service is accessible in accordance with the membership protocol.

Regarding claim 113, **Weisman fails to disclose wherein the common set of services includes a membership service for use by member peer nodes in the peer group to reject or accept group membership applications, wherein the membership service is accessible in accordance with the membership protocol**. The Examiner cites, regarding claim 33, paragraphs [0034], [0050] and [0069-0074] of Weisman. The Examiner appears to be relying on Weisman's device hosting, in general. As described above, paragraph [0034] describes how Weisman's Device Host API enables software modules "to publish themselves as peer networking-enabled devices" and that "The Device Host 100 encapsulates the discovery, description, and control protocols of a peer networking protocol." Paragraph [0050] refers to the fact that the implementer of a hosted device "must provide: a description of the device and its services" and "an implementation of the devices behavior." Paragraphs [0069-0074] describe Weisman's device registration. For instance, Weisman teaches that the Device host publishes complete UPnP device descriptions and mentions two ways that devices can be registered (e.g., either by providing a pointer to a device control object or a CLSID to the Device Host API).

However, the Examiner's cited passage and Weisman's device hosting in general do not have anything to do with a membership service for use by member peer nodes in a peer group *to reject or accept group membership applications* in accordance with the membership protocol. Weisman is completely silent about member peer nodes in a peer group using a membership server to reject or accept group membership applications.

Neither the discovery, description nor control protocols of Weisman's peer networking protocol encapsulated by Device Host 100 include any functionality that can be considered to anticipate a common set of services on at least a subset of the peer groups includes a membership services for use by member peer nodes in the peer group to reject or accept group membership applications, as recited in Appellants' claim.

Claim 114:

1. The cited art fails to disclose wherein each of the plurality of peer nodes is configured to: discover and access an instance of the content on one of the at least a subset of the plurality of peer nodes, wherein the one of the at least a subset of the plurality of peer nodes is local to a network location of the particular peer node on the network, wherein said discovering and accessing the instance of the content is performed in accordance with the one or more peer-to-peer platform protocols; move from the network location to a different network location; discover and access a different instance of the content on a different one of the at least a subset of the plurality of peer nodes.

In regard to claim 114, Weisman fails to disclose **wherein each of the plurality of peer nodes is configured to: discover and access an instance of the content on one of the at least a subset of the plurality of peer nodes, wherein the one of the at least a subset of the plurality of peer nodes is local to a network location of the particular peer node on the network, wherein said discovering and accessing the instance of the content is performed in accordance with the one or more peer-to-peer platform protocols; move from the network location to a different network location; discover and access a *different instance* of the content on a different one of the at least a subset of the plurality of peer nodes**. As argued above regarding several of Appellants' claims (e.g., 53, 55, 57 and 58) Weisman does not disclose anything regarding a peer node *moving to a different network location*. Instead, Weisman describes the use of a device hosting framework providing hosting for software-implemented logical devices, but does is silent regarding a peer node configured to move

from one network location to a different network location. Moreover, Weisman is silent regarding a node moving to a different network location, as well as discovering and accessing a *different instance of the service on a different one of the plurality of peer nodes*.

Furthermore, the Examiner has not even attempted to provide prima facie rejection of claim 100, instead relying on the rejection of claims that recite different subject matter from that recited in claim 100 (Final Action, p. 14).

Please refer to the discussion of claims 53 and 55 above for a more detailed discussion of Weisman's failure to teach anything regarding a device or node moving to a different network location.

Weisman is further silent regarding a peer node configured to move from the network location to a different network location, discover and access a different instance of the content on a different one of the at least a subset of the plurality of peer nodes. The Examiner has not cited any portion of cited art regarding any of Appellants' claim that discloses a peer node configured to move from the network location to a different network location, discover and access a different instance of the content on a different one of the at least a subset of the plurality of peer nodes, as recited in claim 100. Thus, not only has the Examiner failed to even attempt to state a *prima facie* rejection of claim 100, the rejection is unsupported by the cited art.

Thus, for at least the reasons presented above, the rejection of claim 114 is not supported by the cited art and removal thereof is respectfully requested.

Claim 115:

1. The cited art fails to disclose the peer node providing a unique identifier for the peer node to the instance of the service, wherein the unique identifier distinguishes the peer node from the other peer nodes on the network; the peer node

moving from the network location to a different network location; and the instance of the service recognizing the peer node using the unique identifier and routing information to the peer node at the different network location.

Regarding claim 115, **Weisman fails to disclose the peer node providing a unique identifier for the peer node to the instance of the service, wherein the unique identifier distinguishes the peer node from the other peer nodes on the network; the peer node moving from the network location to a different network location; and the instance of the service recognizing the peer node using the unique identifier and routing information to the peer node at the different network location**.

Weisman does not disclose anything regarding a peer node moving to a different network location. Nor does Weisman disclose anything regarding an instance of a service using a unique identifier provided by a peer node to recognize the peer node at a different network location and to route information to the different peer node at the different network address. The Examiner, regarding claim 35, relies on Weisman's UDN as a unique identifier. However, Weisman fails to disclose an instance of a service using the UDN to recognize a device that has moved to a different network location. In fact, as noted above, Weisman fails to disclose a node or device *moving to a different network location*.

2. The cited art teaches away from Appellants' claim.

Furthermore, Weisman teaches, "[t]he foundation for UPnP networking is IP addressing" and that each device obtains an IP address either from a DHCP server or via an AutoIP process that "defines how a device intelligently chooses an IP address from a set of reserved addresses ..." (paragraph [0812]). Weisman clearly teaches the use of IP addresses which clearly cannot be used by an instance of the service to *recognize a peer node at a different network location* to which the peer node has moved, as recited in claim 115. Thus, Weisman ***teaches away*** from an instance of a service using a unique

identifier provided by a peer node to recognize that peer node at a different network address to which the peer node has moved.

Claim 116:

1. The cited art fails to disclose the peer node moving from the network location to a different network location, the peer node discovering a different instance of the content on a different one of the plurality of peer nodes, wherein the different one of the plurality of peer nodes is local to the different network location, the peer node accessing the different instance of the content.

In regard to claim 116, Weisman fails to **the peer node moving from the network location to a different network location, the peer node discovering a different instance of the content on a different one of the plurality of peer nodes, wherein the different one of the plurality of peer nodes is local to the different network location, the peer node accessing the different instance of the content**. As argued above regarding several of Appellants' claims (e.g., 53, 55, 57 and 58) Weisman does not disclose anything regarding a peer node *moving to a different network location*. Instead, Weisman describes the use of a device hosting framework providing hosting for software-implemented logical devices, but does is silent regarding a peer node configured to move from one network location to a different network location. Moreover, Weisman is silent regarding a node moving to a different network location, as well as discovering and accessing a *different instance of the service on a different one of the plurality of peer nodes*.

Furthermore, the Examiner has not even attempted to provide prima facie rejection of claim 100, instead relying on the rejection of claims that recite different subject matter from that recited in claim 100 (Final Action, p. 14).

Please refer to the discussion of claims 53 and 55 above for a more detailed discussion of Weisman's failure to teach anything regarding a device or node moving to a different network location.

Weisman is further silent regarding a peer node configured to move from the network location to a different network location, discover and access a different instance of the content on a different one of the at least a subset of the plurality of peer nodes. The Examiner has not cited any portion of cited art regarding any of Appellants' claim that discloses a peer node configured to move from the network location to a different network location, discover and access a different instance of the content on a different one of the at least a subset of the plurality of peer nodes, as recited in claim 100. Thus, not only has the Examiner failed to even attempt to state a *prima facie* rejection of claim 100, the rejection is unsupported by the cited art.

Thus the rejection of claim 116 is not supported by the cited art and removal thereof is respectfully requested.

Third Ground of Rejection:

The Examiner rejected claims 4, 7, 14, 16, 23, 24, 31, 39, 43, 46, 61, 64, 81, 85, 88, 91, 102, 105 and 109 under 35 U.S.C. § 103(a) as being unpatentable over Weisman in view of Ferguson et al. (U.S. Patent 6,490,618) (hereinafter "Ferguson"). Appellants respectfully traverse this rejection for at least the following reasons. Different groups of claims are addressed under their respective subheadings.

Claims 4, 23, 24, 31, 39, 43, 46, 61, 64, 81, 85, 91, 102, 105 and 109:

Appellants traverse the rejection of these claims for at least the reasons presented above regarding its independent claim, including the fact that Weisman is not a prior art reference.

Claim 7:

The rejection is improper because claim 6, from which claim 7 depends was objected, but would be allowable if re-written in independent form.

Regarding claim 7, the rejection is improper because claim 6, from which claim 7 depends is objected to, but would be allowable if re-written in independent form. As such, claim 7 should also be allowable for at least the same reasons as claim 6 is allowable.

Claim 14:

1. The cited art fails to teach or suggest wherein the one or more peer-to-peer platform protocols include a discovery protocol for discovering pipes in the peer-to-peer environment.

Regarding claim 14, **Weisman in view of Ferguson fails to teach or suggest wherein the one or more peer-to-peer platform protocols include a discovery protocol for discovering pipes in the peer-to-peer environment**. The Examiner does not attempt to provide a prima facie rejection of claim 14. Instead, the Examiner merely relies on the rejection of claim 4. However, claim 4 does not recite the same subject matter as claim 14. For instance, claim 4 does not recite wherein the one or more peer-to-peer platform protocols include a *discovery protocol for discovering pipes* in the peer-to-peer environment.

The Examiner, in the rejection of claim 4 relies on Ferguson, citing col. 5, lines 37-64. The cited passage describes DLSw routers establishing peer relationship with other DLSw routers by opening logical TCP "pipe" connections to remote DLSw routers. However, neither the cited passage, nor any other portion of Ferguson, whether considered singly, or in combination with Weisman, teaches anything about "a discovery protocol for *discovering* pipes" as recited in Appellants' claim.

Ferguson is not concerned with, nor does Ferguson describe, any sort of discovery protocol and further does not describe any discovery protocol for discovery pipes. Instead, Ferguson is concerned with correlating information pertaining to various entities of a mixed Advanced Peer to Peer networking and Data Link Switching computer network. Ferguson teaches identifying a SNA session path and obtaining media access control (MAC) and service access point (SAP) information needed to correlate information relating to the Dependent Logical Unit Requester (DLUR) and physical unit (PU) entities with information relating to the devices to draw mixed network topology needed to assist in problem isolation. See, Ferguson, Abstract and col. 8, line 60 – col. 9, line 39.

Thus, Ferguson, even if combined with Weisman, does not teach or suggest the specific limitation of claim 14. The Examiner's reliance on Ferguson general use of pipe does not teach or suggest, even when combined with Weisman, **wherein the one or more peer-to-peer platform protocols include a discovery protocol for discovering pipes in the peer-to-peer environment.**

Claim 16:

1. The cited art fails to teach or suggest wherein the one or more peer-to-peer platform protocols include a discovery protocol for discovering pipe endpoints in the peer-to-peer environment.

Regarding claim 16, **Weisman in view of Ferguson fails to teach or suggest wherein the one or more peer-to-peer platform protocols include a discovery protocol for discovering pipe endpoints in the peer-to-peer environment**. The Examiner does not attempt to provide a prima facie rejection of claim 16. Instead, the Examiner merely relies on the rejection of claim 4. However, claim 4 does not recite the same subject matter as claim 16. For instance, claim 4 does not recite wherein the one or

more peer-to-peer platform protocols include a *discovery protocol for discovering pipe endpoints* in the peer-to-peer environment.

The Examiner, in the rejection of claim 4 relies on Ferguson, citing col. 5, lines 37-64. The cited passage describes DLSw routers establishing peer relationship with other DLSw routers by opening logical TCP "pipe" connections to remote DLSw routers. However, neither the cited passage, nor any other portion of Ferguson, whether considered singly, or in combination with Weisman, teaches anything about "a discovery protocol for *discovering* pipes" as recited in Appellants' claim.

However, as discussed above regarding claim 14, Ferguson is not concerned with, nor does Ferguson describe, any sort of discovery protocol and further does not describe any discovery protocol for discovery pipe endpoints. Instead, Ferguson is concerned with correlating information pertaining to various entities of a mixed Advanced Peer to Peer networking and Data Link Switching computer network. Ferguson teaches identifying a SNA session path and obtaining media access control (MAC) and service access point (SAP) information needed to correlate information relating to the Dependent Logical Unit Requester (DLUR) and physical unit (PU) entities with information relating to the devices to draw mixed network topology needed to assist in problem isolation. See, Ferguson, Abstract and col. 8, line 60 – col. 9, line 39.

Thus, Ferguson, even if combined with Weisman, does not teach or suggest the specific limitation of claim 16. The Examiner's reliance on Ferguson general use of pipe does not teach or suggest, even when combined with Weisman, **wherein the one or more peer-to-peer platform protocols include <u>a discovery protocol for discovering pipe endpoints</u> in the peer-to-peer environment.**

CONCLUSION

For the foregoing reasons, it is submitted that the Examiner's rejection of claims 1-116 was erroneous, and reversal of his decision is respectfully requested.

No extension of time is due since this Appeal Brief is filed within one month of the mailing date of the Notice of Panel Decision. The Commissioner is authorized to charge any fees that may be due to Meyertons, Hood, Kivlin, Kowert, & Goetzel, P.C. Deposit Account No. 501505/5681-06800/RCK.

Respectfully submitted,

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VIII. CLAIMS APPENDIX

The claims on appeal are as follows.

1. A peer computing system comprising:

a plurality of peer nodes operable to couple to a network;

wherein the plurality of peer nodes are configured to implement a peer-to-peer environment on the network according to a peer-to-peer platform comprising:

a core layer comprising one or more peer-to-peer platform protocols for enabling the plurality of peer nodes to discover each other, communicate with each other, and cooperate with each other to form peer groups and share content in the peer-to-peer environment, wherein at least one of the one or more peer-to-peer platform protocols is configured to be used by a peer node to discover peer nodes that are members of specified peer groups;

a service layer comprising one or more core services each provided by one or more of the plurality of peer nodes in the peer-to-peer environment, wherein at least a subset of the core services are operable to be used by the plurality of peer nodes in forming and participating in the peer groups, and wherein each of the one or more core services are configured to be accessed by the plurality of peer nodes in accordance with at least one of the one or more peer-to-peer platform protocols; and

an application layer comprising one or more applications each provided by one or more of the plurality of peer nodes in the peer-to-peer

environment, wherein each of the one or more applications are configured to be accessed in accordance with at least one of the one or more peer-to-peer platform protocols, and wherein at least a subset of the one or more applications are each configured to access at least one of the one or more core services to perform application tasks in the peer-to-peer environment in accordance with at least one of the one or more peer-to-peer platform protocols.

2. The peer computing system as recited in claim 1, wherein the service layer further comprises one or more other services that are not core services in the peer-to-peer environment.

3. The peer computing system as recited in claim 1, wherein each of the one or more peer-to-peer platform protocols defines one or more advertisement formats for describing and publishing advertisements for resources in the peer-to-peer environment.

4. The peer computing system as recited in claim 3, wherein the resources include one or more of the peer nodes, the peer groups, the content, the core services, other services in the service layer, the applications, pipes, and pipe endpoints, wherein the pipes are communications channels between one or more of the peer nodes, the core services, the other services and the applications in the peer-to-peer environment, and wherein the pipe endpoints are network interfaces on the peer nodes that are configured to be bound to the pipes to establish the communications channels.

5. The peer computing system as recited in claim 1, wherein at least a subset of the one or more peer-to-peer platform protocols defines one or more message formats configured for use in exchanging messages between the peer nodes in accordance with the particular protocol.

6. The peer computing system as recited in claim 1, wherein the one or more

peer-to-peer platform protocols includes one or more of:

a peer discovery protocol for discovering resources in the peer-to-peer environment;

a peer membership protocol for use by the peer nodes in applying for membership in the peer groups;

a peer resolver protocol for use in sending search queries from one peer group member to another peer group member;

a peer information protocol for enabling the peer nodes to obtain information about capabilities and status of other peer nodes in the peer-to-peer environment;

a pipe binding protocol for use in finding the physical location of pipe endpoints and binding the pipe endpoints, wherein pipes are communications channels between one or more of the peer nodes, the core services and the applications in the peer-to-peer environment, and wherein the pipe endpoints are network interfaces on the peer nodes that are configured to be bound to the pipes to establish the communications channels;

an endpoint routing protocol for enabling the peer nodes to request peer routing information to reach the other peer nodes; and

a peer rendezvous protocol for enabling peer nodes to propagate query messages to a next set of peer nodes.

7. The peer computing system as recited in claim 6, wherein the resources include one or more of the peer nodes, the peer groups, the content, the core services, other services in the service layer, the applications, pipes, and pipe endpoints, wherein

the pipes are communications channels between one or more of the peer nodes, the core services, the other services and the applications in the peer-to-peer environment, and wherein the pipe endpoints are network interfaces on the peer nodes that are configured to be bound to the pipes to establish the communications channels.

8. The peer computing system as recited in claim 1, wherein the one or more peer-to-peer platform protocols includes a discovery protocol for discovering the peer nodes in the peer-to-peer environment.

9. The peer computing system as recited in claim 8, wherein the one or more peer-to-peer platform protocols define a peer advertisement format configured for use in advertising the peer nodes in the peer-to-peer environment, wherein said discovering the peer nodes returns one or more peer advertisements for the discovered peer nodes formatted in accordance with the peer advertisement format.

10. The peer computing system as recited in claim 1, wherein the one or more peer-to-peer platform protocols includes a discovery protocol for discovering the peer groups in the peer-to-peer environment.

11. The peer computing system as recited in claim 10, wherein the one or more peer-to-peer platform protocols define a peer group advertisement format configured for use in advertising the peer groups in the peer-to-peer environment, wherein said discovering the peer groups returns one or more peer group advertisements formatted in accordance with the peer group advertisement format.

12. The peer computing system as recited in claim 1, wherein the one or more peer-to-peer platform protocols includes a discovery protocol for enabling the peer nodes to discover and exchange content in the peer-to-peer environment.

13. The peer computing system as recited in claim 12, wherein the one or more peer-to-peer platform protocols define a content advertisement format configured

for use in advertising the content in the peer-to-peer environment, wherein said discovering content returns one or more content advertisements formatted in accordance with the content advertisement format.

14. The peer computing system as recited in claim 1, wherein the one or more peer-to-peer platform protocols include a discovery protocol for discovering pipes in the peer-to-peer environment, wherein the pipes are communications channels between one or more of the peer nodes, the core services and the applications in the peer-to-peer environment.

15. The peer computing system as recited in claim 14, wherein the one or more peer-to-peer platform protocols define a pipe advertisement format configured for use in advertising pipes in the peer-to-peer environment, wherein said discovering pipes returns one or more pipe advertisements formatted in accordance with the pipe advertisement format.

16. The peer computing system as recited in claim 1, wherein the one or more peer-to-peer platform protocols include a discovery protocol for discovering pipe endpoints in the peer-to-peer environment, wherein the pipes are communications channels between one or more of the peer nodes, the core services and the applications in the peer-to-peer environment, and wherein the pipe endpoints are network interfaces on the peer nodes that are configured to be bound to the pipes to establish the communications channels.

17. The peer computing system as recited in claim 16, wherein the one or more peer-to-peer platform protocols define an endpoint advertisement format configured for use in advertising endpoints in the peer-to-peer environment, wherein said discovering endpoints returns one or more endpoint advertisements formatted in accordance with the endpoint advertisement format.

18. The peer computing system as recited in claim 1, wherein the one or more

peer-to-peer platform protocols includes a discovery protocol for discovering the core services and other services provided by the peer nodes in the peer-to-peer environment.

19. The peer computing system as recited in claim 18, wherein the one or more peer-to-peer platform protocols define a service advertisement format configured for use in advertising the core services and the other services provided by the peer nodes in the peer-to-peer environment, wherein said discovering the core services and the other services returns one or more service advertisements formatted in accordance with the service advertisement format.

20. The peer computing system as recited in claim 1, wherein the one or more peer-to-peer platform protocols includes a peer membership protocol for use by the peer nodes in applying for membership in one or more of the peer groups.

21. The peer computing system as recited in claim 1, wherein the one or more peer-to-peer platform protocols include a peer resolver protocol for use in sending generic search queries from one peer node to one or more other peer nodes in the peer-to-peer environment.

22. The peer computing system as recited in claim 21, wherein the search queries are sent to one or more services configured to perform searches as specified by the search queries and to generate responses to the search queries, wherein the one or more services are each hosted by one of the one or more other peer nodes.

23. The peer computing system as recited in claim 22, wherein each of the one or more services is configured to find one or more of peer, peer group, content, service, application, pipe, and pipe endpoint information in accordance with each particular search query received by the particular service handler, wherein the pipes are communications channels between one or more of the peer nodes, the core services, other services in the service layer, and the applications in the peer-to-peer environment, and wherein the pipe endpoints are network interfaces on the peer nodes that are configured

to be bound to the pipes to establish the communications channels.

24. The peer computing system as recited in claim 1, wherein the one or more peer-to-peer platform protocols include a pipe binding protocol for use in finding the physical location of a pipe endpoint and in binding to the pipe endpoint, wherein pipes are communications channels between one or more of the peer nodes, the core services, other services in the service layer, and the applications in the peer-to-peer environment, and wherein the pipe endpoints are network interfaces on the peer nodes that are configured to be bound to the pipes to establish the communications channels.

25. The peer computing system as recited in claim 1, wherein the one or more peer-to-peer platform protocols include an endpoint routing protocol for enabling the peer nodes to request peer routing information to reach other peer nodes.

26. The peer computing system as recited in claim 25, wherein, in said requesting peer routing information, the peer nodes are configured to use the endpoint routing protocol to send route query request messages formatted in accordance with the endpoint routing protocol to one or more router peers to request the peer routing information.

27. The peer computing system as recited in claim 26, wherein each of the router peers is configured to cache route information for one or more routes in the peer-to-peer environment, and wherein each of the router peers is further configured to return route information for a particular route specified by a particular route query request message if the route information for the particular route is cached by the particular router peer.

28. The peer computing system as recited in claim 27, wherein each of the router peers is further configured to forward the route query request message to other router peers if the route information for the particular route is not cached by the particular router peer.

29. The peer computing system as recited in claim 1, wherein the one or more peer-to-peer platform protocols includes a peer information protocol for enabling the peer nodes to obtain information about capabilities and status of other peer nodes in the peer-to-peer environment.

30. The peer computing system as recited in claim 1, wherein each peer group is a collection of cooperating member peer nodes that provides a common set of services to the member peer nodes in the peer-to-peer environment.

31. The peer computing system as recited in claim 30, wherein the common set of services on at least a subset of the peer groups includes one or more of a discovery service, a membership service, an access service, a pipe service, a resolver service and a monitoring service, wherein pipes are communications channels between one or more of the peer nodes, the core services, other services in the service layer, and the applications in the peer-to-peer environment.

32. The peer computing system as recited in claim 30, wherein the peer-to-peer platform protocols include a discovery protocol, wherein the common set of services on at least a subset of the peer groups includes a discovery service for use by member peer nodes in said peer group to discover advertised resources including peer nodes and peer groups in the peer computing system in accordance with the discovery protocol.

33. The peer computing system as recited in claim 30, wherein the peer-to-peer platform protocols include a membership protocol, wherein the common set of services on at least a subset of the peer groups includes a membership service for use by member peer nodes in said peer group to reject or accept group membership applications in accordance with the membership protocol.

34. The peer computing system as recited in claim 30, wherein the common set of services includes one or more user-defined services.

35. The peer computing system as recited in claim 1, wherein each of the plurality of peer nodes includes a unique identifier configured for use in distinguishing each peer node from the other peer nodes in the peer-to-peer environment.

36. A peer node comprising:

one or more network interfaces for coupling to a network;

a memory comprising program instructions, wherein the program instructions are executable within the peer node to implement, according to a peer-to-peer platform:

a core layer comprising one or more peer-to-peer platform protocols for enabling the peer node to discover other peer nodes, communicate with the other peer nodes, and cooperate with the other peer nodes to form peer groups and share content in a peer-to-peer environment on the network, wherein at least one of the one or more peer-to-peer platform protocols is configured to be used by the peer nodes to discover other peer nodes that are members of specified peer groups;

a service layer comprising one or more core services in the peer-to-peer environment, wherein at least a subset of the core services are operable to be used by the peer node and the other peer nodes in forming and participating in the peer groups, and wherein each of the one or more core services are configured to be accessed in accordance with at least one of the one or more peer-to-peer platform protocols; and

an application layer comprising one or more applications, wherein each of the one or more applications are configured to be accessed by the peer node and the other peer nodes in accordance with at least one of the one or more peer-to-peer platform protocols, and wherein at least a subset of the one or more applications are each configured to access at least one of the one or more core services to perform application tasks in the peer-to-peer environment in accordance with at least one of the one or more peer-to-peer platform protocols.

37. The peer node as recited in claim 36, wherein the service layer further comprises one or more other services that are not core services in the peer-to-peer environment.

38. The peer node as recited in claim 36, wherein the program instructions are further executable to host one or more services in a peer group in which the peer node is a member peer, wherein other member peer nodes access the hosted services from the peer node.

39. The peer node as recited in claim 36, wherein the program instructions are further executable to publish advertisements for resources in the peer-to-peer environment using one or more advertisement formats defined by the peer-to-peer platform protocols, wherein the resources include one or more of the peer nodes, the peer groups, content, the core services, other services in the services layer, the applications, pipes and pipe endpoints, wherein the pipes are communications channels between one or more of the peer nodes, the core services, the other services and the applications in the peer-to-peer environment, and wherein the pipe endpoints are network interfaces on the peer nodes that are configured to be bound to the pipes to establish the communications channels.

40. The peer node as recited in claim 36, wherein the program instructions are

further executable to send messages to and receive messages from the other peer nodes in the peer-to-peer environment using one or more message formats each defined by one of the one or more peer-to-peer platform protocols.

41. The peer node as recited in claim 36, wherein the one or more peer-to-peer platform protocols includes one or more of:

a peer discovery protocol for use by the peer node in discovering resources in the peer-to-peer environment, wherein the resources include one or more of the peer nodes, the peer groups, content, services, pipes and pipe endpoints;

a peer membership protocol for use by the peer node in applying for membership in the peer groups;

a peer resolver protocol for use in sending search queries from the peer node to other peer nodes in the peer-to-peer environment;

a peer information protocol for enabling the peer node to obtain information about capabilities and status of the other peer nodes;

a pipe binding protocol for use by the peer node in finding the physical location of pipe endpoints and binding the pipe endpoints, wherein pipes are communications channels between one or more of the peer nodes, the core services and the applications in the peer-to-peer environment, and wherein the pipe endpoints are network interfaces on the peer nodes that are configured to be bound to the pipes to establish the communications channels;

an endpoint routing protocol for enabling the peer node to request peer routing information to reach one or more of the other peer nodes in the peer-to-peer environment; and

a peer rendezvous protocol for enabling peer nodes to propagate query messages to a next set of peer nodes.

42. The peer node as recited in claim 36, wherein the one or more peer-to-peer platform protocols includes a discovery protocol, wherein the program instructions are further executable to discover resources in the peer-to-peer environment in accordance with the discovery protocol, wherein, in said discovering the resources, the program instructions are further executable to receive one or more advertisements for the discovered resources formatted in accordance with the discovery protocol.

43. The peer node as recited in claim 42, wherein the resources include one or more of the peer nodes, the peer groups, the content, the core services, other services in the service layer, the applications, pipes, and pipe endpoints, wherein the pipes are communications channels between one or more of the peer nodes, the core services, the other services and the applications in the peer-to-peer environment, and wherein the pipe endpoints are network interfaces on the peer nodes that are configured to be bound to the pipes to establish the communications channels.

44. The peer node as recited in claim 36, wherein the one or more peer-to-peer platform protocols includes a peer membership protocol, wherein the program instructions are further executable to apply for membership in one or more of the peer groups in accordance with the peer membership protocol.

45. The peer node as recited in claim 36, wherein the one or more peer-to-peer platform protocols includes a peer resolver protocol, wherein the program instructions are further executable to send generic search queries to one or more of the other peer nodes in accordance with the peer resolver protocol.

46. The peer node as recited in claim 36, wherein the one or more peer-to-peer platform protocols include a pipe binding protocol, wherein pipes are communications channels between one or more of the peer nodes, the core services, other services in the service layer, and the applications in the peer-to-peer environment, and wherein the pipe endpoints are network interfaces on the peer nodes that are configured to be bound to the pipes to establish the communications channels, and wherein the program instructions are further executable to:

find the physical location of a pipe endpoint in accordance with the pipe binding protocol; and

bind to the pipe endpoint in accordance with the pipe binding protocol.

47. The peer node as recited in claim 36, wherein the one or more peer-to-peer platform protocols include an endpoint routing protocol, wherein the program instructions are further executable to request peer routing information to the other peer nodes in the peer-to-peer environment in accordance with the endpoint routing protocol.

48. The peer node as recited in claim 36, wherein the one or more peer-to-peer platform protocols includes a peer information protocol, wherein the program instructions are further executable to obtain information about capabilities and status of the other peer nodes in the peer-to-peer environment in accordance with the peer information protocol.

49. The peer node as recited in claim 36, wherein the peer node is a member peer node in a peer group, wherein the peer group is a collection of cooperating member peer nodes that provides a common set of services to the member peer nodes.

50. The peer node as recited in claim 49, wherein the peer-to-peer platform protocols include a discovery protocol, wherein the common set of services provided by

the peer group includes a discovery service, wherein the program instructions are further executable to discover advertised resources including the other peer nodes and the peer groups in the peer-to-peer environment using the discovery service in accordance with the discovery protocol.

51. The peer node as recited in claim 49, wherein the peer-to-peer platform protocols include a membership protocol, wherein the common set of services includes a membership service, wherein the program instructions are further executable to reject or accept group membership applications using the membership service in accordance with the membership protocol.

52. The peer node as recited in claim 36, wherein the peer node includes a unique identifier configured to distinguish the peer node from the other peer nodes in the peer-to-peer environment

53. A peer node comprising:

one or more network interfaces for coupling to a network;

a memory comprising program instructions, wherein the program instructions are executable within the peer node to discover and access an instance of a service on one of a plurality of peer nodes, wherein the one of the plurality of peer nodes is local to a network location of the peer node on the network, wherein the plurality of peer nodes each host an instance of the same service, and wherein said discovering and accessing the instance of the service are performed in accordance with one or more peer-to-peer platform protocols;

wherein the peer node is configured to move from the network location to a different network location;

wherein the program instructions are further executable within the peer node to discover and access a different instance of the service on a different one of the plurality of peer nodes, wherein the different one of the plurality of peer nodes is local to the different network location, and wherein said discovering and accessing the different instance of the service are performed in accordance with the one or more peer-to-peer platform protocols.

54. The peer node as recited in claim 53, wherein the peer node includes a unique identifier of the peer node, wherein the unique identifier distinguishes the peer node from the other peer nodes on the network, wherein the program instructions are further executable to provide the unique identifier to the different instance of the service, and wherein the different instance of the service is operable to recognize the peer node using the unique identifier and to route information to the peer node at the different network location.

55. A peer computing system comprising:

a plurality of peer nodes, wherein the plurality of peer nodes each implement one or more peer-to-peer platform protocols for enabling the plurality of peer nodes to host and access services in a peer-to-peer environment;

at least a subset of the plurality of peer nodes that each host an instance of a service;

wherein each of the at least a subset of the plurality of peer nodes is operable to provide access to an instance of the service hosted by the particular peer node to a different one of the plurality of peer nodes at a network location, wherein the particular peer node is local to the network location;

wherein the different one of the plurality of peer nodes is operable to provide a unique identifier to the instance of the service hosted by the particular peer node, wherein the unique identifier distinguishes the different one of the plurality of peer nodes from the other peer nodes on the network;

wherein the different one of the plurality of peer nodes is operable to move to a different network location; and

wherein the instance of the service is operable to recognize the different one of the plurality of peer nodes using the unique identifier and to route information provided by the service to the different one of the plurality of peer nodes at the different network location.

56. A peer node comprising:

one or more network interfaces for coupling to a network;

a memory comprising program instructions, wherein the program instructions are executable within the peer node to discover and access an instance of a service on one of one or more peer nodes, wherein the one of the one or more peer nodes is local to a network location of the peer node on the network, wherein the one or more peer nodes each host an instance of the same service, and wherein said discovering and accessing the instance of the service are performed in accordance with one or more peer-to-peer platform protocols;

wherein the program instructions are further executable within the peer node to provide a unique identifier for the peer node to the instance of the service, wherein the unique identifier distinguishes the peer node from the other peer nodes on the network;

wherein the peer node is configured to move from the network location to a different network location;

wherein the program instructions are further executable within the peer node to:

discover and access the same instance of the service on the one of the one or more peer nodes, wherein said discovering and accessing the same instance of the service are performed in accordance with the one or more peer-to-peer platform protocols; and

wherein the instance of the service is operable to recognize the peer node using the unique identifier and to route information provided by the service to the peer node at the different network location.

57. A peer computing system comprising:

a plurality of peer nodes, wherein the plurality of peer nodes each implement one or more peer-to-peer platform protocols for enabling the plurality of peer nodes to discover and access contents in a peer-to-peer environment;

at least a subset of the plurality of peer nodes that each include an instance of a content;

wherein each of the plurality of peer nodes is configured to:

discover and access an instance of the content on one of the at least a subset of the plurality of peer nodes, wherein the one of the at least a subset of the plurality of peer nodes is local to a network location of the particular peer node on the network, wherein said discovering and accessing the instance of the content is performed

in accordance with the one or more peer-to-peer platform protocols;

move from the network location to a different network location;

discover and access a different instance of the content on a different one of the at least a subset of the plurality of peer nodes, wherein the one of the at least a subset of the plurality of peer nodes is local to the different network location, wherein said discovering and accessing the different instance of the content are performed in accordance with the one or more peer-to-peer platform protocols.

58. A peer node comprising:

one or more network interfaces for coupling to a network;

a memory comprising program instructions, wherein the program instructions are executable within the peer node to discover and access an instance of a content on one of a plurality of peer nodes, wherein the one of the plurality of peer nodes is local to a network location of the peer node on the network, wherein the plurality of peer nodes each host an instance of the same content, and wherein said discovering and accessing the instance of the service are performed in accordance with one or more peer-to-peer platform protocols;

wherein the peer node is configured to move from the network location to a different network location;

wherein the program instructions are further executable within the peer node to discover and access a different instance of the content on a different one of the plurality of peer nodes, wherein the different one of the plurality of

peer nodes is local to the different network location, and wherein said discovering and accessing the different instance of the content are performed in accordance with the one or more peer-to-peer platform protocols.

59. A peer computing system comprising:

a plurality of peer nodes operable to couple to a network;

means for the peer nodes to discover each other, communicate with each other, and cooperate with each other to form peer groups, share content, and discover other peer nodes that are members of specified peer groups, in a peer-to-peer environment on the network;

means for the peer nodes to provide, discover and access one or more services in the peer-to-peer environment, wherein at least a subset of the services are core services operable to be used by the plurality of peer nodes in forming and participating in the peer groups; and

means for the peer nodes to provide, discover and access one or more applications in the peer-to-peer environment; and

means for at least a subset of the one or more applications to discover and access at least one of the one or more services to perform application tasks in the peer-to-peer environment.

60. The peer computing system as recited in claim 59, further comprising means for the one or more services to discover and access each other in the peer-to-peer environment.

61. The peer computing system as recited in claim 59, further comprising means for describing and publishing resources in the peer-to-peer environment, wherein the resources include one or more of the peer nodes, the peer groups, the content, the services, the applications, pipes, and pipe endpoints, wherein the pipes are communications channels between one or more of the peer nodes, the services and the applications in the peer-to-peer environment, and wherein the pipe endpoints are network interfaces on the peer nodes that are configured to be bound to the pipes to establish the communications channels.

62. The peer computing system as recited in claim 59, further comprising means for providing communications channels for the peer nodes, the services and the applications to exchange information in the peer-to-peer environment.

63. The peer computing system as recited in claim 59, further comprising means for exchanging messages between the peer nodes in the peer-to-peer environment.

64. The peer computing system as recited in claim 59, further comprising means for discovering resources in the peer-to-peer environment, wherein the resources include one or more of the peer nodes, the peer groups, the content, the services, the applications, pipes and pipe endpoints, wherein the pipes are communications channels between one or more of the peer nodes, the services and the applications in the peer-to-peer environment, and wherein the pipe endpoints are network interfaces on the peer nodes that are configured to be bound to the pipes to establish the communications channels.

65. The peer computing system as recited in claim 59, further comprising means for the peer nodes to apply for membership in one or more of the peer groups.

66. The peer computing system as recited in claim 59, further comprising means for sending generic search queries from one of the peer nodes to one or more other of the peer nodes.

67. The peer computing system as recited in claim 59, further comprising:

means for finding communications channels between one or more of the peer nodes, the services and the applications in the peer-to-peer environment; and

means for binding to the communications channels.

68. The peer computing system as recited in claim 59, further comprising means for the peer nodes to request peer routing information to reach other peer nodes in the peer-to-peer environment.

69. The peer computing system as recited in claim 59, further comprising means for the peer nodes to obtain information about capabilities and status of other peer nodes in the peer-to-peer environment.

70. The peer computing system as recited in claim 59, wherein the peer groups are collection of cooperating member peer nodes, further comprising means for the peer groups to each provide a common set of services to its member peer nodes.

71. The peer computing system as recited in claim 59, further comprising means for member peer nodes in a peer group to receive and reject or accept group membership applications.

72. The peer computing system as recited in claim 59, further comprising means for distinguishing each peer node from the other peer nodes on the network.

73. A peer computing system comprising:

a plurality of peer nodes configured to couple to a network;

means for the peer nodes to discover each other, communicate with each other, and cooperate with each other to form peer groups and host services in a peer-to-peer environment on the network;

wherein at least a subset of the plurality of peer nodes each hosts an instance of a particular service;

means for each of the plurality of peer nodes to discover and access an instance of a service provided by one of the at least a subset of the plurality of peer nodes, wherein the one of the at least a subset of the plurality of peer nodes is local to a network location of the particular one of the plurality of peer nodes;

wherein each of the plurality of peer nodes is operable to move to a different network location; and

means for each of the plurality of peer nodes to discover and access a different instance of the service provided by a different one of the at least a subset of the plurality of peer nodes, wherein the one of the at least a subset of the plurality of peer nodes is local to the different network location of the particular one of the plurality of peer nodes.

74. The peer computing system of claim 73, further comprising means for the different instance of the service to recognize the particular one of the plurality of peer nodes and to route information provided by the service to the particular one of the plurality of peer nodes at the different network location.

75. A peer computing system comprising:

a plurality of peer nodes configured to couple to a network;

means for the peer nodes to discover each other, communicate with each other, and cooperate with each other to form peer groups and host services in a peer-to-peer environment on the network;

wherein at least a subset of the plurality of peer nodes each hosts an instance of a particular service;

means for each of the plurality of peer nodes to discover and access an instance of a service provided by one of the at least a subset of the plurality of peer nodes, wherein the one of the at least a subset of the plurality of peer nodes is local to a network location of the particular one of the plurality of peer nodes;

wherein each of the plurality of peer nodes is operable to move to a different network location;

means for each of the plurality of peer nodes to access the instance of the service provided by the one of the at least a subset of the plurality of peer nodes from the different network location of the particular one of the plurality of peer nodes; and

means for the instance of the service to recognize the particular one of the plurality of peer nodes and to route information provided by the service to the particular one of the plurality of peer nodes at the different network location.

76. A peer computing system comprising:

a plurality of peer nodes operable to couple to a network;

means for the peer nodes to discover each other, communicate with each other, and cooperate with each other to form peer groups and to share content;

wherein at least a subset of the plurality of peer nodes each hosts an instance of a particular content;

means for each of the plurality of peer nodes to discover and access an instance of a content provided by one of the at least a subset of the plurality of peer nodes, wherein the one of the at least a subset of the plurality of peer nodes is local to a network location of the particular one of the plurality of peer nodes;

wherein each of the plurality of peer nodes is operable to move to a different network location; and

means for each of the plurality of peer nodes to discover and access a different instance of the content provided by a different one of the at least a subset of the plurality of peer nodes, wherein the different one of the at least a subset of the plurality of peer nodes is local to the different network location of the particular one of the plurality of peer nodes.

77. A method for implementing a peer-to-peer environment on a network, the method comprising:

a plurality of peer nodes coupled to a network each implementing a core layer of a peer-to-peer platform, wherein the core layer comprises one or more peer-to-peer platform protocols for enabling the plurality of peer nodes to discover each other, communicate with each other, and cooperate with

each other to form peer groups and share content in the peer-to-peer environment, wherein at least one of the one or more peer-to-peer platform protocols is configured to be used by the peer nodes to discover other peer nodes that are members of specified peer groups;

the plurality of peer nodes each implementing a service layer comprising one or more core services each provided by one or more of the plurality of peer nodes in the peer-to-peer environment, wherein each of the one or more core services are configured to be accessed by peer nodes in the peer-to-peer environment in accordance with at least a subset of the one or more peer-to-peer platform protocols;

the plurality of peer nodes each implementing an application layer comprising one or more applications each provided by one or more of the plurality of peer nodes in the peer-to-peer environment, wherein each of the one or more applications are configured to be accessed in accordance with at least one of the one or more peer-to-peer platform protocols, and wherein at least a subset of the one or more applications are each configured to access at least one of the one or more core services to perform application tasks in the peer-to-peer environment in accordance with at least one of the one or more peer-to-peer platform protocols; and

at least a subset of the plurality of peer nodes accessing at least a subset of the core services in accordance with at least one of the one or more peer-to-peer platform protocols to form one or more peer groups in the peer-to-peer environment.

78. The method as recited in claim 77, wherein the one or more peer-to-peer platform protocols include a peer membership protocol for joining or forming a peer group with other peer nodes, wherein the one or more core services include a membership service for use by the peer nodes in forming the peer groups and joining the

peer groups, wherein the membership service is configured to be accessed by the peer nodes in the peer-to-peer environment in accordance with the membership protocol, the method further comprising one or more of the plurality of peer nodes forming a peer group in the peer-to-peer environment using the membership service.

79. The method as recited in claim 78, further comprising:

another peer node applying for membership in the peer group using the membership service;

one or more member peer nodes of the peer group determining if the other peer node is qualified for membership in the peer group in response to the application for membership using the membership service; and

if the member peer nodes determine that the other peer node is qualified for membership in the peer group, the other peer node becoming a member peer node in the peer group.

80. The method as recited in claim 77, wherein the one or more peer-to-peer platform protocols include a discovery protocol for discovering resources in the peer-to-peer environment, and wherein the one or more core services include a discovery service for use by the peer nodes to discover advertised resources in the in the peer-to-peer environment, wherein the discovery service is configured to be accessed by the peer nodes in the peer-to-peer environment in accordance with the discovery protocol.

81. The method as recited in claim 80, wherein the advertised resources include one or more of the peer nodes, the peer groups, the content, the core services, other services in the service layer, the applications, pipes, and pipe endpoints, wherein the pipes are communications channels between one or more of the peer nodes, the core services, the other services and the applications in the peer-to-peer environment, and wherein the pipe endpoints are network interfaces on the peer nodes that are configured

to be bound to the pipes to establish the communications channels.

82. The method as recited in claim 80, wherein the resources include the peer nodes, the method further comprising:

one of the plurality of peer nodes broadcasting a peer discovery message in the peer-to-peer environment using the discovery service; and

the one of the plurality of peer nodes receiving one or more response messages in response to the peer discovery message, wherein the response messages each include information about a particular peer node, wherein the information is configured for use by the one of the plurality of peer nodes in establishing a connection to the particular peer node; and

wherein the peer discovery message and the one or more response messages are in a format defined by the discovery protocol, and wherein said broadcasting a peer discovery message and said receiving one or more response messages are performed in accordance with the discovery protocol.

83. The method as recited in claim 80, wherein the resources include the peer groups, the method further comprising:

one of the plurality of peer nodes broadcasting a peer group discovery message in the peer-to-peer environment using the discovery service; and

the one of the plurality of peer nodes receiving a peer group response message in response to the peer group discovery message from each of one or more of the peer groups in the peer-to-peer environment, wherein the peer group response messages each include information about a particular peer group, wherein the information is configured for use by the one of the plurality of peer nodes in joining the particular peer group; and

wherein the peer group discovery message and the peer group response message are in a format defined by the discovery protocol, and wherein said broadcasting a peer group discovery message and said receiving a peer group response message are performed in accordance with the discovery protocol.

84. The method as recited in claim 77, further comprising publishing advertisements for resources in the peer-to-peer environment using one or more advertisement formats each defined by one of the one or more peer-to-peer platform protocols.

85. The method as recited in claim 84, wherein the resources include one or more of the peer nodes, the peer groups, the content, the core services, other services in the service layer, the applications, pipes, and pipe endpoints, wherein the pipes are communications channels between one or more of the peer nodes, the core services, the other services and the applications in the peer-to-peer environment, and wherein the pipe endpoints are network interfaces on the peer nodes that are configured to be bound to the pipes to establish the communications channels.

86. The method as recited in claim 77, further comprising two or more of the plurality of peer nodes exchanging messages in the peer-to-peer environment using one or more message formats each defined by one of the one or more peer-to-peer platform protocols.

87. The method as recited in claim 77, wherein the one or more peer-to-peer platform protocols include a discovery protocol, the method further comprising a peer node discovering resources in the peer-to-peer environment in accordance with the discovery protocol, wherein said discovering the resources comprises the peer node receiving one or more advertisements for the discovered resources formatted in accordance with the peer discovery protocol.

88. The method as recited in claim 87, wherein the resources include one or more of the peer nodes, the peer groups, the content, the core services, other services in the service layer, the applications, pipes, and pipe endpoints, wherein the pipes are communications channels between one or more of the peer nodes, the core services, the other services and the applications in the peer-to-peer environment, and wherein the pipe endpoints are network interfaces on the peer nodes that are configured to be bound to the pipes to establish the communications channels.

89. The method as recited in claim 77, wherein the one or more peer-to-peer platform protocols includes a peer membership protocol, the method further comprising one of the plurality of peer nodes applying for membership in one or more of the peer groups in accordance with the peer membership protocol.

90. The method as recited in claim 77, wherein the one or more peer-to-peer platform protocols includes a peer resolver protocol, the method further comprising one of the plurality of peer nodes sending one or more generic search queries to one or more other peer nodes in the peer-to-peer environment in accordance with the peer resolver protocol.

91. The method as recited in claim 77, wherein the one or more peer-to-peer platform protocols include a pipe binding protocol, the method further comprising:

one of the plurality of peer nodes finding the physical location of a pipe endpoint in accordance with the pipe binding protocol; and

the peer node binding to the pipe endpoint in accordance with the pipe binding protocol;

wherein pipes are communications channels between one or more of the peer nodes, the core services, other services in the service layer, and the

applications in the peer-to-peer environment, and wherein the pipe endpoints are network interfaces on the peer nodes that are configured to be bound to the pipes to establish the communications channels.

92. The method as recited in claim 77, wherein the one or more peer-to-peer platform protocols include an endpoint routing protocol, the method further comprising one of the plurality of peer nodes requesting peer routing information to other peer nodes in the peer-to-peer environment in accordance with the endpoint routing protocol.

93. The method as recited in claim 77, wherein the one or more peer-to-peer platform protocols include a peer information protocol, the method further comprising one of the plurality of peer nodes obtaining information about capabilities and status of one or more other peer nodes in the peer-to-peer environment in accordance with the peer information protocol.

94. The method as recited in claim 77, wherein each peer group is a collection of cooperating member peer nodes, further comprising each peer group providing a common set of services to the member peer nodes in the peer-to-peer environment.

95. The method as recited in claim 94, wherein the one or more peer-to-peer platform protocols include a discovery protocol, wherein the common set of services includes a discovery service, wherein the discovery service is accessible in accordance with the discovery protocol, the method further comprising one of the member peer nodes in one of the peer groups discovering advertised resources in the peer-to-peer environment using the discovery service.

96. The method as recited in claim 94, wherein the one or more peer-to-peer platform protocols include a membership protocol, wherein the common set of services includes a membership service, wherein the membership service is accessible in accordance with the membership protocol, the method further comprising:

a peer node not in one of the peer groups applying for membership in the peer group; and

the member peer nodes of the peer group rejecting or accepting the peer node's group membership application using the membership service.

97. A method comprising:

a peer node discovering an instance of a service on one of a plurality of peer nodes, wherein the one of the plurality of peer nodes is local to a network location of the peer node on a network, wherein the plurality of peer nodes each host an instance of the same service;

the peer node accessing the instance of the service;

wherein said discovering and said accessing the instance of the service are performed in accordance with one or more peer-to-peer platform protocols;

the peer node moving from the network location to a different network location;

the peer node discovering a different instance of the service on a different one of the plurality of peer nodes, wherein the different one of the plurality of peer nodes is local to the different network location;

the peer node accessing the different instance of the service; and

wherein said discovering and accessing the different instance of the service are performed in accordance with the one or more peer-to-peer platform protocols.

98. The method as recited in claim 97, further comprising:

the peer node providing a unique identifier for the peer node to the different instance of the service, wherein the unique identifier distinguishes the peer node from the other peer nodes on the network; and

the different instance of the service recognizing the peer node using the unique identifier; and

the different instance of the service routing information to the peer node at the different network location.

99. A method comprising:

a peer node discovering an instance of a service on one of a plurality of peer nodes, wherein the one of the plurality of peer nodes is local to a network location of the peer node on a network, wherein the plurality of peer nodes each host an instance of the same service;

the peer node accessing the instance of the service;

wherein said discovering and said accessing the instance of the service are performed in accordance with one or more peer-to-peer platform protocols;

the peer node providing a unique identifier for the peer node to the instance of the service, wherein the unique identifier distinguishes the peer node from the other peer nodes on the network;

the peer node moving from the network location to a different network location;

the peer node discovering the same instance of the service on the one of the plurality of peer nodes;

the peer node accessing the same instance of the service; and

wherein said discovering and accessing the same instance of the service are performed in accordance with the one or more peer-to-peer platform protocols;

the instance of the service recognizing the peer node using the unique identifier; and

the instance of the service routing information to the peer node at the different network location.

100. A method comprising:

a peer node discovering an instance of a content on one of a plurality of peer nodes, wherein the one of the plurality of peer nodes is local to a network location of the peer node on a network, wherein the plurality of peer nodes each include an instance of the same content;

the peer node accessing the instance of the content;

wherein said discovering and accessing the instance of the content are performed in accordance with one or more peer-to-peer platform protocols;

the peer node moving from the network location to a different network location;

the peer node discovering a different instance of the content on a different one of the plurality of peer nodes, wherein the different one of the plurality of peer nodes is local to the different network location;

the peer node accessing the different instance of the content;

wherein said discovering and accessing the different instance of the content are performed in accordance with the one or more peer-to-peer platform protocols.

101 A computer-accessible storage medium, comprising software instructions computer-executable to implement:

a plurality of peer nodes coupled to a network each implementing a core layer of a peer-to-peer platform, wherein the core layer comprises one or more peer-to-peer platform protocols for enabling the plurality of peer nodes to discover each other, communicate with each other, and cooperate with each other to form peer groups and share content in a peer-to-peer environment, wherein at least one of the one or more peer-to-peer platform protocols is configured to be used by the peer nodes to discover other peer nodes that are members of specified peer groups;

the plurality of peer nodes each implementing a service layer comprising one or more core services each provided by one or more of the plurality of peer nodes in the peer-to-peer environment, wherein each of the one or more core services are configured to be accessed by peer nodes in the peer-to-peer environment in accordance with at least a subset of the one or more peer-to-peer platform protocols;

the plurality of peer nodes each implementing an application layer comprising one or more applications each provided by one or more of the plurality of peer nodes in the peer-to-peer environment, wherein each of the one or more applications are configured to be accessed in accordance with at least one of the one or more peer-to-peer platform protocols, and wherein at least a subset of the one or more applications are each configured to access at least one of the one or more core services to perform application tasks in the peer-to-peer environment in accordance with at least one of the one or more peer-to-peer platform protocols; and

at least a subset of the plurality of peer nodes accessing at least a subset of the core services in accordance with at least one of the one or more peer-to-peer platform protocols to form one or more peer groups in the peer-to-peer environment.

102. The medium as recited in claim 101, wherein each of the one or more peer-to-peer platform protocols defines one or more advertisement formats for describing resources in the peer-to-peer environment, and wherein the software instructions are further computer-executable to publish advertisements for the resources in the peer-to-peer environment, wherein the resources include one or more of the peer nodes, the peer groups, the content, the core services, other services in the service layer, the applications, pipes, and pipe endpoints, wherein the pipes are communications channels between one or more of the peer nodes, the core services, the other services and the applications in the peer-to-peer environment, and wherein the pipe endpoints are network interfaces on the peer nodes that are configured to be bound to the pipes to establish the communications channels.

103. The medium as recited in claim 101, wherein at least a subset of the one or more peer-to-peer platform protocols defines one or more message formats configured for use in exchanging messages between the peer nodes in the peer-to-peer environment

in accordance with the particular protocol.

104. The medium as recited in claim 101, wherein the one or more peer-to-peer platform protocols includes a peer discovery protocol for discovering resources in the peer-to-peer environment, wherein said discovering the resources returns one or more advertisements for the discovered resources formatted in accordance with the peer discovery protocol.

105. The medium as recited in claim 101, wherein the resources include one or more of the peer nodes, the peer groups, the content, the core services, other services in the service layer, the applications, pipes, and pipe endpoints, wherein the pipes are communications channels between one or more of the peer nodes, the core services, the other services and the applications in the peer-to-peer environment, and wherein the pipe endpoints are network interfaces on the peer nodes that are configured to be bound to the pipes to establish the communications channels.

106. The medium as recited in claim 101, wherein the one or more peer-to-peer platform protocols includes a peer membership protocol for use by the peer nodes in applying for membership in one or more of the peer groups.

107. The medium as recited in claim 101, wherein the one or more peer-to-peer platform protocols includes a peer resolver protocol for use in sending generic search queries from one peer node to one or more other peer nodes in the peer-to-peer environment.

108. The medium as recited in claim 101, wherein the one or more peer-to-peer platform protocols include a pipe binding protocol for use in finding the physical location of a pipe endpoint and in binding to the pipe endpoint.

109. The medium as recited in claim 101, wherein the one or more peer-to-peer platform protocols include an endpoint routing protocol for enabling the peer nodes to

request peer routing information to reach other peer nodes in the peer-to-peer environment, wherein pipes are communications channels between one or more of the peer nodes, the core services, other services in the service layer, and the applications in the peer-to-peer environment, and wherein the pipe endpoints are network interfaces on the peer nodes that are configured to be bound to the pipes to establish the communications channels.

110. The medium as recited in claim 101, wherein the one or more peer-to-peer platform protocols includes a peer information protocol for enabling the peer nodes to obtain information about capabilities and status of other peer nodes in the peer-to-peer environment.

111. The medium as recited in claim 101, wherein each peer group is a collection of cooperating member peer nodes that provide a common set of services in the peer-to-peer environment.

112. The medium as recited in claim 111, wherein the one or more peer-to-peer platform protocols include a discovery protocol, wherein the common set of services includes a discovery service for use by member peer nodes in said peer group to discover advertised resources including the peer nodes and the peer groups in the peer-to-peer environment, wherein the discovery service is accessible in accordance with the discovery protocol.

113. The medium as recited in claim 111, wherein the one or more peer-to-peer platform protocols include a membership protocol, wherein the common set of services includes a membership service for use by member peer nodes in said peer group to reject or accept group membership applications, wherein the membership service is accessible in accordance with the membership protocol.

114. A computer-accessible storage medium, comprising software instructions computer-executable within a peer node to implement:

a peer node discovering an instance of a service on one of a plurality of peer nodes, wherein the one of the plurality of peer nodes is local to a network location of the peer node on a network, wherein the plurality of peer nodes each host an instance of the same service;

the peer node accessing the instance of the service;

wherein said discovering and said accessing the instance of the service are performed in accordance with one or more peer-to-peer platform protocols;

the peer node moving from the network location to a different network location;

the peer node discovering a different instance of the service on a different one of the plurality of peer nodes, wherein the different one of the plurality of peer nodes is local to the different network location;

the peer node accessing the different instance of the service; and

wherein said discovering and accessing the different instance of the service are performed in accordance with the one or more peer-to-peer platform protocols;

the peer node providing a unique identifier for the peer node to the different instance of the service, wherein the unique identifier distinguishes the peer node from the other peer nodes on the network; and

the different instance of the service recognizing the peer node using the unique identifier; and

the different instance of the service routing information to the peer node at the different network location.

115. A computer-accessible storage medium, comprising software instructions computer-executable within a peer node to implement:

a peer node discovering an instance of a service on one of a plurality of peer nodes, wherein the one of the plurality of peer nodes is local to a network location of the peer node on a network, wherein the plurality of peer nodes each host an instance of the same service;

the peer node accessing the instance of the service;

wherein said discovering and said accessing the instance of the service are performed in accordance with one or more peer-to-peer platform protocols;

the peer node providing a unique identifier for the peer node to the instance of the service, wherein the unique identifier distinguishes the peer node from the other peer nodes on the network;

the peer node moving from the network location to a different network location;

the peer node discovering the same instance of the service on the one of the plurality of peer nodes;

the peer node accessing the same instance of the service; and

wherein said discovering and accessing the same instance of the service are performed in accordance with the one or more peer-to-peer platform protocols;

the instance of the service recognizing the peer node using the unique identifier; and

the instance of the service routing information to the peer node at the different network location.

116. A computer-accessible storage medium, comprising software instructions computer-executable within a peer node to implement:

a peer node discovering an instance of a content on one of a plurality of peer nodes, wherein the one of the plurality of peer nodes is local to a network location of the peer node on a network, wherein the plurality of peer nodes each include an instance of the same content;

the peer node accessing the instance of the content;

wherein said discovering and accessing the instance of the content are performed in accordance with one or more peer-to-peer platform protocols;

the peer node moving from the network location to a different network location;

the peer node discovering a different instance of the content on a different one of the plurality of peer nodes, wherein the different one of the plurality of peer nodes is local to the different network location;

the peer node accessing the different instance of the content;

wherein said discovering and accessing the different instance of the content are performed in accordance with the one or more peer-to-peer platform protocols.

IX. EVIDENCE APPENDIX

No evidence submitted under 37 CFR §§ 1.130, 1.131 or 1.132 or otherwise entered by the Examiner is relied upon in this appeal.

X. RELATED PROCEEDINGS APPENDIX

A copy is included herewith of a Decision on Appeal from U.S. Application No. 10/054,809 which involved a similar issue as is present in this application in regard to a rejection based on a published utility application that was filed later than the filing date of the application under examination, but which claimed priority to a provisional application filed earlier than the application under examination. As in the instant case, the Appellants in the 10/054,809 case argued that the later published utility was not a prior art reference since the earlier provisional application did not provide full support for the subject matter relied on by the Examiner in the later utility application and that no claim of the published utility application was supported in the provisional. Also as in the instance case the Examiner in the 10/054,809 case argued that it was the Applicants burden to prove that the earlier provisional applications do not provide support for the subject matter of the later utility application and the necessary claim support. On appeal, the Board confirmed that the burden was on the Examiner, in order to present a proper *prima facie* rejection, to show where the earlier provisional applications provide support for each instance of subject matter relied on in the later utility application.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte BERNARD A. TRAVERSAT, LI GONG, KULDIPSINGH PABLA, WILLIAM J. YEAGER, MOHAMED M. ABDELAZIZ, MICHAEL J. DUIGOU, ERIC POUYOUL, JEAN-CHRISTOPHE HUGLY, WILLIAM N. JOY, and MICHAEL J. CLARY

Appeal 2007-2225
Application 10/054,809
Technology Center 2100

Decided: August 31, 2007

Before KENNETH W. HAIRSTON, LANCE LEONARD BARRY, and HOWARD B. BLANKENSHIP, *Administrative Patent Judges*.

BLANKENSHIP, *Administrative Patent Judge*.

DECISION ON APPEAL

This appeal involves claims 1-111, the only claims pending in this application. We have jurisdiction under 35 U.S.C. §§ 6(b), 134(a).

INTRODUCTION

The claims are directed to a system and method for providing advertisements in a peer-to-peer networking environment. Claims 1 and 110 are illustrative:

1. A peer-to-peer network system, comprising:

a plurality of peers, wherein each peer comprises a network node configured to communicate with one or more other ones of said peers over one or more networks;

a peer advertisement for each of said peers, wherein each peer advertisement comprises an identification of and communication address for a corresponding one of said peers;

a plurality of peer services or content provided by one or more of said peers; and

a service or content advertisement for each of said services or content, wherein each service or content advertisement comprises an identification of a corresponding service or content and an indication of how to access the corresponding service or content.

110. A computer-readable storage medium configured to store program instructions, wherein the program instructions are computer-executable to implement:

a peer node broadcasting a discovery query message specifying a type of resource on the network; and

the peer node receiving one or more advertisements for the specified type of resource in response to said discovery query message;

wherein each advertisement is a programming language independent metadata document formatted in accordance with a peer-to-peer protocol.

The Examiner relies on the following prior art references to show unpatentability:

Borella	US 6,269,099	Jul. 31, 2001
Teodosiu	US 2002/0062375 A1	May 23, 2002 (filed Sep. 13, 2001)

"Microsoft Computer Dictionary", Microsoft, 4th Edition, 1999, 252.

The rejections as presented by the Examiner appear to be as follows:

1. Claims 110 and 111 are rejected under 35 U.S.C. § 101 as being directed to nonstatutory subject matter.
2. Claims 110 and 111 were rejected in the Final Rejection under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement. The Answer does not expressly withdraw the rejection, but neither does it repeat it. *See Ex parte Emm*, 118 USPQ 180, 181 (Bd. App. 1957) (rejection not referred to in the examiner's answer is assumed to have been withdrawn). We conclude that the § 112, first paragraph rejection has been withdrawn.
3. Claims 1-4, 8-16, 18-34, 36-52, 54-61, 63-72, 74-81, 83-100, and 102-111 are rejected under 35 U.S.C. § 103(a) as unpatentable over Teodosiu and Borella.
4. The Final Rejection rejected claim 17 under 35 U.S.C § 103(a) as unpatentable over Teodosiu, Borella, and Microsoft Dictionary. The Answer adds claims 35 and 73 to the rejection, without notification that a new ground of rejection has been entered.
5. The rejection of claims 5-7, 53, 62, 82, and 101 is expressly withdrawn in the Answer (3).

OPINION

Section 101 rejection

Claims 110 and 111 recited a "tangible, computer accessible medium" configured to store program instructions. The claims were rejected (Final Rejection 2) because, in the Examiner's view, they were not limited to tangible embodiments. The rejection made reference to page 127 of the Specification, referring to tangible embodiments (storage media) and intangible embodiments (transmission media or signals). The Examiner directed that the rejection could be overcome by amending to include only physical computer media and not transmission media or other intangible media. The Examiner further indicated that transmission media would not be statutory but storage media would be. (*Id.*)

Appellants submitted an amendment after final rejection, proposing to amend claims 110 and 111 to their present form. The Examiner indicated that the amendment would be entered for purposes of appeal (Advisory Action mailed Sept. 13, 2006), and that an explanation of how the amended claims would be rejected was "provided below or appended." (*Id.*) The Advisory Action, however, does not explain how the amended claims would be rejected, other than by reference to "prior art."

The Examiner in the Answer (4) again rejects claims 110 and 111 as being directed to nonstatutory subject matter, again referring to page 127 of the Specification. According to the rejection in the Answer, the Specification provides evidence that Appellants intend "the medium" to include signals, a form of energy, which is not one of the four categories of invention. The rejection in the Answer also submits that claims 35-38, 43, 44, 46, and 61 are drawn to a form of energy and not statutory, but we

presume that a new ground of rejection has not been entered against those claims.

Appellants in the Reply Brief (2) argue that the relevant portion of page 127 of the Specification distinguishes storage media (presently claimed) as magnetic or optical media (such as disk, RAM, or ROM) from transmission media or signals such as electrical, electromagnetic, or digital signals conveyed via a communication medium.

We agree with Appellants that the referenced portion of the Specification does not support the Examiner's position that the present claims are intended to encompass a form of energy. Because the basis for the rejection of the claims is in error, we do not sustain the rejection of claims 110 and 111 under 35 U.S.C. § 101 as being directed to nonstatutory subject matter.

Rejections over the prior art

The instant application was filed in the USPTO on January 22, 2002. The Examiner's rejections over the prior art rely on Teodosiu, a U.S. utility patent application filed on September 13, 2001 and published May 23, 2002. The application thus may be a reference under 35 U.S.C. § 102(e)(1), as the (Teodosiu) application for patent was filed in September 2001, apparently "before the invention by the applicant for patent." The date of the instant invention, if considered to be the date of filing of the application in the USPTO, is later than the Teodosiu application filing.

However, according to Appellants, the instant application claims benefit under 35 U.S.C. § 119(e) for the filing of four provisional applications, ranging in date from January 22, 2001 to July 31, 2001. All the

provisional applications thus predate the September 13, 2001 filing date of Teodosiu.

The Examiner does not find that any of the claims rejected over the prior art has an effective filing date later than the filing date of Teodosiu. Therefore, the rejections over the prior art are based, conversely, on the implicit findings that each of the claims that are rejected are fully supported by provisional applications relied upon by Appellants. Although there are no express findings, we assume that the Examiner has verified that every claim rejected over the prior art finds support in the provisional applications.

The Examiner applies Teodosiu against the claims because, according to the face of the published application, the application purports to be a "Non-provisional" of two provisional applications filed on November 22, 2000, both of which predate all of Appellants' provisional applications.

We will assume for the purposes of this appeal that U.S. provisional applications can contribute to the effective filing date of a published application. Appellants appear not to contend otherwise, but seem to argue that the use of provisional applications is limited by *In re Wertheim*, 646 F.2d 527, 209 USPQ 554 (CCPA 1981), in much the same way that the effective filing date of U.S. patents, as references, may be limited when there is a continuation-in-part in a chain of priority under 35 U.S.C. § 120.

In light of the rejections set forth by the Examiner, however, we can further assume, for the purposes of this appeal, that provisional applications can have prior art effect to the greater extent described in the *Manual of Patent Examining Procedure* (MPEP) § 706.02(f)(1) (Eighth Ed., Rev. 5, Aug. 2006), "Example 2." According to Example 2, a published U.S. nonprovisional application that claims "benefit" under 35 U.S.C. § 119(e) to

a prior U.S. provisional application is to be accorded the earlier filing date as its prior art date "under 35 U.S.C. § 102(e)," assuming the earlier-filed application "has proper support for the subject matter as required by 35 U.S.C. 119(e). . . ." "[T]he subject matter" must refer to whatever subject matter in a published application that is relied upon in a rejection over the prior art. "[B]enefit" under § 119 requires, *inter alia*, an invention disclosed in the provisional application "in the manner provided by the first paragraph of section 112" (35 U.S.C. § 119(e)(1)), so "proper support" must refer to at least written description support as required by 35 U.S.C. § 112, first paragraph.

Appellants allege (Appeal Br. 15-18; Reply Br. 3-6) that the Teodosiu provisional applications vary greatly from the published utility application, and that a comparison between the published application and the provisional applications shows that the teachings in the published application on which the rejection relies are largely missing from the provisional applications.

The Examiner's statements of rejection over the prior art (Answer 5-12) refer to text in Teodosiu, and appear not to mention the provisional applications that are the basis for alleging that Teodosiu can be considered prior art. With respect to Appellants' arguments regarding the deficiencies of the Teodosiu provisional applications, the Examiner responds that "the provisional" and the published application of Teodosiu disclose the same invention. "Even though, the Provisional application is shorter, but it provided the base for the published application. Under U.S.C.112, it does not mention that the provisional application and the utility application have to be the same length or exactly the same word by word with the utility application." (Answer 15.)

The allocation of burdens requires that the USPTO produce the factual basis for its rejection of an application under 35 U.S.C. §§ 102 and 103. *In re Piasecki*, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984) (citing *In re Warner*, 379 F.2d 1011, 1016, 154 USPQ 173, 177 (CCPA 1967)). The one who bears the initial burden of presenting a prima facie case of unpatentability is the examiner. *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992).

The Examiner has not provided copies in this appeal of the two provisional applications in controversy, much less shown where any kind of § 112 support may be found in the provisional applications for the subject matter of the published application upon which the rejection relies. In accordance with the Examiner's theory that some or all of the Teodosiu published application may be applied against the instant claims, the rejection should show, to establish a prima facie case for unpatentability, where § 112 support resides in the earlier provisional applications for each instance of specific subject matter relied upon in the published application, including an explanation why the provisionals would still be recognized by the artisan as providing support if not "word for word" the same as the later text or drawings. Mere reference to the text or drawings of Teodosiu is not sufficient. The Teodosiu published application, by itself, shows no more than the material published from the application that was filed in the USPTO on September 13, 2001, which, according to this record, is later than the effective filing date of each of the claims rejected.

Thus, even if we assume that a published application may have an effective filing date as prior art based on earlier filed provisional applications, the rejections that rely on Teodosiu fail to set forth a prima

facie case for unpatentability. Because Teodosiu is used in all the rejections under 35 U.S.C. § 103, we do not sustain any of the standing rejections over the prior art.

CONCLUSION

In summary, the rejection of claims 110 and 111 under 35 U.S.C. § 101 as being directed to nonstatutory subject matter is reversed. The rejection of claims 1-4, 8-52, 54-61, 63-81, 83-100, and 102-111 under 35 U.S.C. § 103 is reversed.

REVERSED

rwk

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